

File 344:Chinese Patents Abs Aug 1985-2005/May
(c) 2005 European Patent Office
File 347:JAPIO Nov 1976-2005/Feb(Updated 050606)
(c) 2005 JPO & JAPIO
File 350:Derwent WPIX 1963-2005/UD,UM &UP=200537
(c) 2005 Thomson Derwent
File 348:EUROPEAN PATENTS 1978-2005/Jun W02
(c) 2005 European Patent Office
File 349:PCT FULLTEXT 1979-2005/UB=20050609,UT=20050602
(c) 2005 WIPO/Univentio
File 331:Derwent WPI First View UD=200537
(c) 2005 Thomson Derwent
File 371:French Patents 1961-2002/BOPI 200209
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Set	Items	Description
S1	24826	SMARTCARD? OR (SMART OR CHIP) () (CARD OR CARDS)
S2	9143	DIGITAL() (CERTIFICATE? OR TOKEN OR TOKENS) OR CHIPCARD? OR ELECTRONIC() APPLIANCE?
S3	80444	ATM OR AUTOMATIC() TELLER() MACHINE?
S4	283445	(BANKING() MACHINE? OR (TELLER? OR TRANSACTION? OR ELECTRONIC?) (2N) (MACHINE? OR DEVICE? OR APPARATUS?) OR CONSUMER() TRANSACTION() FACILIT? OR AUTOMATIC() DEPOSIT() PAYMENT() MACHINE?)
S5	7649	(DIGITAL OR CRYPTOGRAPH? OR ENCODE?) () (SIGNATURE? OR SIGNING)
S6	3294	(PRIVATE OR PERSONAL OR SECRET) () (KEYS OR KEYS)
S7	26	DIEBOLD() INC?
S8	3380	AU=(PARMELEE, C? OR PERMELEE C? OR SMITH, M? OR SMITH M?)
S9	32825	S1 OR S2
S10	353772	S3 OR S4
S11	9549	S5 OR S6
S12	1656	S9(5N) S10
S13	4	S12(5N) S11
S14	400	S2 AND S3
S15	192	S14 AND S5
S16	69	S15 AND S6
S17	69	S16 NOT S13
S18	40	S17 AND IC=G06F
S19	0	S7 AND S2
S20	4	S7 AND S3
S21	31	S8 AND S9
S22	16	S21 AND IC=G06F

13/3,K/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2005 Thomson Derwent. All rts. reserv.

014384870 **Image available**

WPI Acc No: 2002-205573/200226

Related WPI Acc No: 1998-286866; 1999-229499; 1999-229532; 1999-229533;
1999-254381; 1999-254713; 1999-302739; 1999-326705; 1999-337420;
1999-347718; 1999-371118; 1999-404743; 1999-430385; 1999-551358;
1999-580306; 1999-620728; 2000-038358; 2000-062031; 2000-072883;
2000-116314; 2000-237871; 2000-271386; 2000-271431; 2000-271434;
2000-271435; 2000-292842; 2000-317943; 2000-412154; 2000-412324;
2000-412325; 2000-431586; 2000-442668; 2000-452188; 2000-572269;
2000-572270; 2000-572271; 2000-587437; 2000-594320; 2000-594321;
2000-611443; 2000-611444; 2000-628263; 2000-638138; 2000-638201;
2000-679484; 2001-016509; 2001-025022; 2001-025251; 2001-025253;
2001-032160; 2001-050025; 2001-050091; 2001-070561; 2001-071075;
2001-071078; 2001-071395; 2001-081051; 2001-090793; 2001-091968;
2001-103149; 2001-183260; 2001-226690; 2001-226823; 2001-235264;
2001-381383; 2001-381384; 2001-408281; 2001-451708; 2001-541567;
2001-602746; 2001-625876; 2002-075461; 2002-090516; 2002-130120;
2002-130151; 2002-130882; 2002-171999; 2002-172001; 2002-256031;
2002-280917; 2002-280928; 2002-280940; 2002-292065; 2002-362426

XRFX Acc No: N02-156546

Auto-burning of a digital signature, for an electronic device and an intelligent token device such as a smart card, that automatically burns a digital signature into the memory of the devices

Patent Assignee: CODEX TECHNOLOGIES INC (CODE-N)

Inventor: TELLO J A

Number of Countries: 094 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200153915	A1	20010726	WO 2000IB1846	A	20001211	200226 B
AU 200115455	A	20010731	AU 200115455	A	20001211	200226
EP 1214639	A1	20020619	EP 2000977826	A	20001211	200240
			WO 2000IB1846	A	20001211	

Priority Applications (No Type Date): US 2000487476 A 20000119

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200153915 A1 E 40 G06F-001/00

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA
CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP
KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT
RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR
IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

AU 200115455 A G06F-001/00 Based on patent WO 200153915

EP 1214639 A1 E G06F-001/00 Based on patent WO 200153915

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT
LI LT LU LV MC MK NL PT RO SE SI TR

Abstract (Basic):

... The automatic burning of a **digital signature** into the memory of an **electronic device** and a **smart card** is accomplished by means of the programming voltage supply line. Hence, both the **electronic device** and the **smart card** contain the same **digital signature** which can be checked for a match every time the card is inserted into the...

... The figure shows a flow diagram of the auto-burning of a

digital signature for both an electronic device and a smart card .

13/3,K/2 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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01030324

MOBILE ELECTRONIC COMMERCE SYSTEM

MOBILES ELEKTRONISCHES HANDELSSYSTEM

SYSTEME DE COMMERCE ELECTRONIQUE MOBILE

PATENT ASSIGNEE:

MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD, (216884), 1006, Oaza-Kadoma,
Kadoma-shi, Osaka 571-0000, (JP), (Applicant designated States: all)

INVENTOR:

TAKAYAMA, Hisashi, 5-6-12-104, Matsubara, Setagaya-ku, Tokyo 156-0043,
(JP)

LEGAL REPRESENTATIVE:

Grunecker, Kinkeldey, Stockmair & Schwanhausser Anwaltssozietat (100721)
, Maximilianstrasse 58, 80538 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 950968 A1 991020 (Basic)
WO 9909502 990225

APPLICATION (CC, No, Date): EP 98937807 980813; WO 98JP3608 980813

PRIORITY (CC, No, Date): JP 97230564 970813

DESIGNATED STATES: DE; FR; GB

RELATED DIVISIONAL NUMBER(S) - PN (AN):

(EP 2004015278)

INTERNATIONAL PATENT CLASS: G06F-017/60

ABSTRACT WORD COUNT: 150

NOTE:

Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; Japanese
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9942	17239
SPEC A	(English)	9942	160346
Total word count - document A			177585
Total word count - document B			0
Total word count - documents A + B			177585

...SPECIFICATION by the input means of the electronic wallet;
presented card information and a registered card **certificate** for
the **electronic** telephone card; and
state management information accompanied by a digital signature that
is provided by...

13/3,K/3 (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00941469 **Image available**

AUTOMATED BANKING MACHINE PROCESSING SYSTEM AND METHOD

SYSTEME ET PROCEDE DE TRAITEMENT DE GUICHET AUTOMATIQUE BANCAIRE

Patent Applicant/Assignee:

DIEBOLD INCORPORATED, 5995 MAYFAIR ROAD, NORTH CANTON, OH 44720, US, US
(Residence), US (Nationality)

Inventor(s):

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Legal Representative:

JOCKE Ralph E (agent), 231 South Broadway, Medina, OH 44256, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200275498 A2-A3 20020926 (WO 0275498)

Application: WO 2002US8398 20020318 (PCT/WO US0208398)

Priority Application: US 2001276974 20010319

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

BR CA CN CO IN MX PL RU ZA

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

Publication Language: English

Filing Language: English

Fulltext Word Count: 15394

Fulltext Availability:

Detailed Description

Detailed Description

... the

exemplary processing components may be digitally signed and be associated with digital certificates. The **digital signature** and **digital certificates** may be used by the **ATM** to validate that the processing components originate from a trusted source of processing components. Also

...

13/3,K/4 (Item 2 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00820365 **Image available**

SECURITY SYSTEM INVOLVING CREATION AND AUTO-BURNING OF A DIGITAL SIGNATURE IN AN ELECTRONIC DEVICE AND INTELLIGENT TOKEN DEVICE

SYSTEME DE SECURITE A CREATION ET AUTODESTRUCTION DE SIGNATURES NUMERIQUES D'UN DISPOSITIF ELECTRONIQUE ET D'UN DISPOSITIF INTELLIGENT A JETONS

Patent Applicant/Assignee:

CODEX TECHNOLOGIES INCORPORATED, Unit 118, 3989 Henning Drive, Burnaby, British Columbia V5C 6N5, CA, CA (Residence), CA (Nationality)

Inventor(s):

TELLO Jose Alberto, 3433 E. 43rd Avenue, Vancouver, British Columbia V5R 5X9, CA,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200153915 A1 20010726 (WO 0153915)

Application: WO 2000IB1846 20001211 (PCT/WO IB0001846)

Priority Application: US 2000487476 20000119

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Sylvia Keys

15-Jun-05 03:40 PM

Filing Language: English
Fulltext Word Count: 12819

Fulltext Availability:
Detailed Description

English Abstract

...been created and auto-burned, control is passed to a software program that authenticates the **digital signatures** burned in the **electronic device** (101) and the **smart card**. If these **digital signatures** are found to match then normal operation of the electronic device (101) is permitted, otherwise...

Detailed Description

... memory and to the memory means of an intelligent token device. The functionality of said **electronic device** is disabled unless a **smart card** with a matching **digital signature** is

3

inserted in an intelligent token device reader/writer that is connected to the...signature area of the flash memory of the electronic device. From this process, both the **electronic device** and the **smart card** contain the same **digital signature** that are checked for a match every time the smart card is inserted in the...

...authentication procedure involves the sending of the digital signature stored in the microprocessor of the **electronic device** to the **smart card**. An **electronic device digital signature Test Number (T)** and Witness Number (t) are also sent for the operation of the...

...generation of the smart card's digital signature Test Number (T'). If $T = T'$ then the **digital signatures** of the **electronic device** and the inserted **smart card** match and the normal operation of the electronic device is allowed to continue.
BRIEF DESCRIPTION...

...a flow chart that show the continuation of the auto-burning process in both the **electronic device** and **smart card** after the creation of the **digital signature** by said smart card.

FIGS 3G, 3H and 3I together comprise a portion of a...is the sending of a command by the application software of the microprocessor of the **electronic device** to the **smart card** to initiate the **digital signature** creation and auto burning process 317. Once said process is initiated by the smart card...Figures 3E and 3F show the continuation of the auto-burning process in both the **electronic device** and **smart card** after the creation of the **digital signature** by said smart card.

With the creation and storage of the digital signature and start...signature authentication procedure, which if the digital signature in the electronic device microprocessor matches the **digital signature** in the inserted **smart card**, normal operation of the **electronic device** is allowed and the electronic device microprocessor waits for its next instructions.

1 6

Correcting...device waits for a command from the smart card 473 which will indicate if the **digital signature** of the inserted **smart card** matches that of said **electronic device**.

Once received by the **smart card**, said encoded and encrypted Witness

Number $RS(E(t))$ is decoded 475 using the error...

...compared to the Test Number (T') generated by the electronic device to determine if the **digital signatures** of said **electronic device** and the inserted **smart card** are a match 481. If $T' = T$ then a match is confirmed and a command...

?

18/3,K/1 (Item 1 from file: 348)
DIALOG(R) File 348:EUROPEAN PATENTS
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01815901

A gaming software distribution network in a gaming system environment
Netzwerk zum Vertreiben von Spielsoftware in einer Umgebung fur
Spielsysteme

Resau de distribution de logiciels pour jeux dans un environnement de systeme
de jeu

PATENT ASSIGNEE:

WMS Gaming Inc, (3901722), 3401 North California Avenue, Chicago,
Illinois 60618, (US), (Applicant designated States: all)

INVENTOR:

Gentles, Thomas A., 735 Braewood Drive, Algonquin Illinois 60102, (US)
Ryan, Chad A., 6073 River Bend Drive, Lisle Illinois 60532-2194, (US)
Schwartz, Richard T., 838 W. Diversey 3W, Chicago Illinois 60614, (US)
Swamy, Vikram, 4615 N. Beacon Street, Chicago Illinois 60640, (US)

LEGAL REPRESENTATIVE:

Butler, Michael John (29061), Frank B. Dehn & Co., European Patent
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PATENT (CC, No, Kind, Date): EP 1480102 A2 041124 (Basic)

APPLICATION (CC, No, Date): EP 2004252269 040416;

PRIORITY (CC, No, Date): US 463314 P 030416

DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR;
HU; IE; IT; LI; LU; MC; NL; PL; PT; RO; SE; SI; SK; TR

EXTENDED DESIGNATED STATES: AL; HR; LT; LV; MK

INTERNATIONAL PATENT CLASS: **G06F-001/00**

ABSTRACT WORD COUNT: 142

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LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

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CLAIMS A	(English)	200448	962
SPEC A	(English)	200448	26583
Total word count - document A			27545
Total word count - document B			0
Total word count - documents A + B			27545

INTERNATIONAL PATENT CLASS: **G06F-001/00**

...SPECIFICATION FIG. 1 and FIGs. 4A and 4B;

FIGs. 3E-3G is a flowchart of a **digital certificate** authentication
routine that may be performed by one or more of the security elements or

...
...key generation and signing routine, and FIGs. 3E-3G illustrates an
authentication routine using the **digital certificates** and key
generated by the certification authority initialization routine and the
key generation and signing...g., RSA-public-key algorithm for both
encryption and authentication, ElGamal, and elliptical curves); (4)
digital signature schemes using public-private key-pairs (e.g., RSA,
digital signature algorithm-DSA, ElGamal signatures); (5) symmetric
encryption (e.g., Triple-DES, AES, Algorithm X, etc...

...configured as an RSA ACE/Server and a Policy Server), the SecurID
functions like an **ATM** card for the secure gaming network environment
10. The SecurID requires a user (i.e...

...secure communication apparatus 24, 30, for example, MACs, one-way hash algorithms, public-key cryptography, **digital signature** schemes (e.g., code signing), symmetric encryption, session keys (i.e., a key that is...

...to invert. In that case, the data integrity system can be configured to scan using **cryptographic signatures** of file content in addition to scanning for file name changes. The data integrity system...protocol. If the VPN tunneling protocol is not properly implemented (via an inappropriate encryption algorithm, **digital signature** algorithm, and so forth), however, one or more non-authentic data packets may exploit the...

...or more of symmetric encryption, message authentication codes, public-key encryption, one way hash functions, **digital signature** schemes, random number generator schemes, or combinations. Moreover, the cryptographic protocol provided by the integrity...

...IIb. Key-Based Routines For Ensuring Integrity, Authentication, and Non-repudiation

Symmetric cryptosystems that use **secret keys** for encryption of plaintext messages and decryption of the resulting ciphertext messages, are one type...

...multiple-key public key cryptosystems that use public keys for encryption of plaintext messages (or **digital signatures**) and **private keys** for decryption of resulting ciphertext messages, are another type of key-based algorithm. Generally, symmetric...

...of key-based algorithms, generation, management, and control (including key transmission) of secret, public, and **private keys** requires a level of protection equivalent to the level of protection sought for the data...

...between the first and second gaming devices, in one embodiment.

Public-private Key-pair and **Secret Keys** :

Private-public key-pairs used by the gaming devices of the secure gaming system environment...

...generator) or by using techniques such as key-crunching to convert randomly selected phrases into **private keys**. The private key may also be generated randomly using a cryptographic algorithm such as triple...

...be accomplished by using a trusted courier (e.g., a casino employee), by using a **digital signature** protocol using a public key database, or by using a key distribution center (discussed below...

...of security required. For example, utilization of the trusted courier, the key-encryption key, the **digital signature** protocol using a public key database, the one-way hash function, the key distribution center...

...key certificates derived from a series of certification authority entities and linked or chained via **digital signatures** (discussed in connection with FIGs. 3C and 3D). In the case of a series of...

...a certificate).

The public key certificate is a digitized certificate referred to herein as a "**digital certificate**" and may be viewed as an electronic passport equivalent to prove identity of associated gaming...

...number of ways, including, for example, using MACs, one-way hash algorithms, public-key cryptography, **digital signature** schemes using a pair of keys - a public key and a private key, symmetric encryption... example, a coaxial cable connection, a phone line connection, wireline frame relay connection, a wireline **ATM** connection, a wireline Ethernet connection, etc. Thus, gaming data may be transmitted from the customer ...more individual authentication protocols, for example, MACs, one-way hash algorithms, public-key cryptography (PKI), **digital signature** schemes or code signing, symmetric encryption, session keys, and random number generators, to name a...

...CLAIMS message authentication code protocol, a one-way hash protocol, a public-key cryptography protocol, a **digital signature** protocol, a symmetric encryption protocol, and a random number generator protocol.

14. A gaming system...

18/3,K/2 (Item 2 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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01226398

CRYPTOGRAPHIC DEVICE AND METHOD FOR ASSURING INTEGRITY OF TRUSTED AGENT COMMUNICATIONS

VERSCHLUSSELUNGSEINRICHTUNG UND VERFAHREN ZUR INTEGRITÄTSSICHERSTELLUNG DER GESICHERTEN NACHRICHTEN EINES TREUHANDVERMITTLERS

DISPOSITIF CRYPTOGRAPHIQUE ET PROCÉDE ASSURANT L'INTEGRITE DES COMMUNICATIONS D'AGENT DE CONFIANCE

PATENT ASSIGNEE:

INTEL CORPORATION, (322933), 2200 Mission College Boulevard, Santa Clara, CA 95052, (US), (Proprietor designated states: all)

INVENTOR:

DAVIS, Derek, L., 4509 East Desert Trumpet Road, Phoenix, AZ 85044, (US)

HERBERT, Howard, C., 16817 South 1st Drive, Phoenix, AZ 85045, (US)

LEGAL REPRESENTATIVE:

Molyneaux, Martyn William et al (34019), Harrison Goddard Foote 40-43

Chancery Lane, London WC2A 1JA, (GB)

PATENT (CC, No, Kind, Date): EP 1183582 A1 020306 (Basic)

EP 1183582 B1 041117

WO 2000065426 001102

APPLICATION (CC, No, Date): EP 2000921543 000329; WO 2000US8536 000329

PRIORITY (CC, No, Date): US 298360 990423

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: **G06F-001/00**

NOTE:

No A-document published by EPO

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	200447	875
CLAIMS B	(German)	200447	862
CLAIMS B	(French)	200447	979
SPEC B	(English)	200447	3708

Total word count - document A 0

Total word count - document B 6424

Total word count - documents A + B 6424

INTERNATIONAL PATENT CLASS: **G06F-001/00**

...SPECIFICATION that a digital platform is operating as intended.
 Encrypting the communication channels or using conventional **digital signatures** may prevent content from being unknowingly modified during transmission; however, these techniques do not provide...

...the operations for recovering the combined result, inclusive of TAEH and MH, from the notary **digital signature**.

Figure 8 is an illustrative block diagram of an embodiment of the present invention in...

...content" is generally defined as (i) control information (e.g., Internet Protocol "IP" commands, keys, **digital signatures**, **digital certificates**, etc.), and/or (ii) data in the form of a still image, video (e.g...

...and Adleman "RSA" based functions), or even a function for digitally signing information (e.g., **Digital Signature** Algorithm "DSA" or a RSA-based signing functions).

In addition, a "**digital certificate**" is generally defined as any information used for authentication. Normally, this information includes a public...

...includes any person or entity in a position of trust to guarantee or sponsor the **digital certificate**. A "**digital signature**" is generally used to ensure that the data has not been illicitly modified after being...

...the security kernel (block 420). This key pair includes a pair of unique public and **private keys** (PUKTAE and PRKTAE) to be associated with this specific instantiation of this type or version...

...or any another arithmetic operation. The "assertion" is a statement indicating the purpose for a **digital signature**. For example, the assertion may include information concerning the type, model or version number of...

...combined (block 440), the combined result is digitally signed with PRKD to produce a "notary **digital signature**" (NDS) as shown in block 445. NDS along with a device certificate chain, namely at...

...recover data, inclusive of PUKD as also shown in Figure 6 where "D" constitutes a **digital signature** verify function (block 510). Since the notary **digital signature** has been digitally signed by PRKD, the recovery of PUKD allows the message hash, TAEH...

...head-end equipment and provides, if not previously provided, credit card information, automated teller machine (**ATM**), checking account routing number or any other financial information to the head-end equipment (block...

...CLAIMS arranged to control execution of cryptographic functions and hash functions and to produce a notary **digital signature** including a combined result of a hash value of the second segment of code (330) and an assertion indicating a purpose of the notary **digital signature**, the combined result digitally signed by a private key (360) of the cryptographic device (230...

...the cryptographic device (230), a private key (360) of the cryptographic device (230) and a **digital certificate** chain (370) including at least one device certificate.

3. The cryptographic device (230) of claim...

...of claim 6, wherein the second segment of code (330) passes the message, the notary **digital signature** and the **digital certificate** chain to a graphical user interface.

10. The cryptographic device (230) of claim 1 in...

...320) being code, in communications with the trusted agent executable (330), that produces the notary **digital signature**.

13. The cryptographic device (230) of claim 11, wherein the trusted agent executable (330) further...

...receiving a selected segment of code (330) by the platform (130); and providing a notary **digital signature** to the content provider (110), the notary **digital signature** including a combined result of a hash value of the selected segment of code (330)...

...control of the platform (130) and an assertion to indicate a purpose of the notary **digital signature**, the combined result digitally signed by a private key of a cryptographic device implemented within ...

...the hash value of the selected segment of code and the assertion from the notary **digital signature**.

17. The method of claim 16, further comprising: performing a hash operation on a copy...

...of code (330).

18. The method of claim 15, wherein the providing of the notary **digital signature** includes the combined result of the hash value of the selected segment of code (330)...

18/3,K/3 (Item 3 from file: 348)
 DIALOG(R) File 348:EUROPEAN PATENTS
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01165757

Four-party credit/debit payment protocol

Kredit/Debit Bezahlprotokoll für vier Teilnehmer

Protocol de paiement par credit/debit pour quatre participants

PATENT ASSIGNEE:

INTERNATIONAL BUSINESS MACHINES CORPORATION, (200123), , Armonk, NY
 10504, (US), (Applicant designated States: all)

INVENTOR:

Linehan, Mark, c/o IBM U.K. Ltd., Intellectual Prop. Law, Hursley Park,
 Winchester, Hampshire SO21 2JN, (GB)

LEGAL REPRESENTATIVE:

Burt, Roger James, Dr. (52152), IBM United Kingdom Limited Intellectual
 Property Department Hursley Park, Winchester Hampshire SO21 2JN, (GB)

PATENT (CC, No, Kind, Date): EP 1017030 A2 000705 (Basic)

EP 1017030 A3 031203

APPLICATION (CC, No, Date): EP 99310629 991229;

PRIORITY (CC, No, Date): US 221869 981229

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;
 LU; MC; NL; PT; SE

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: G07F-007/10; G07F-019/00; G06F-017/60

ABSTRACT WORD COUNT: 85

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Sylvia Keys

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FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200027	1908
SPEC A	(English)	200027	9085
Total word count - document A			10993
Total word count - document B			0
Total word count - documents A + B			10993

...INTERNATIONAL PATENT CLASS: G06F-017/60

...SPECIFICATION identity and privileges of the holder. Usually used as synonymous with an electronic certificate or **digital certificate** since an actual document is of little value in a world of electronic commerce.

Certificate...

...users who are no longer authorized to use them.

Certificate chain - a hierarchy of trusted **digital certificates** that can be "chained" or authenticated back to the "chain's" ultimate trust level- the top of the hierarchy called the "root certificate."

Digital certificate - an electronic document digitally signed by a trusted party. The **digital certificate** binds a person's or entity's unique name to a public/private key pair.

Digital signature - In the context of SET Secure Electronic Transaction programs, data that is appended to, or is a cryptographic transformation of, a data unit. **Digital signature** enables the recipient of the data unit to verify the source and integrity of the...

...wallet during electronic commerce transactions. A wallet can hold a user's payment information, a **digital certificate** to identify the user, and shipping information to speed transactions. The consumer benefits because his...

...party for the service.

Key pair - In computer security, a matched set of public and **private keys**. When used for encryption, the sender uses the public key half to encrypt the message...path 128' to the acquirer gateway 106, signing the message with the acquiring bank's **digital signature**. The acquirer gateway 106 forwards it over the internet path 128 to the merchant, authorizing...

...to a consumer's computer, a merchant message including a wallet initiation message, a merchant **digital signature**, and a **digital certificate** from an acquiring bank, said wallet initiation message including a payment amount, an order description...

...then authorizing payment by sending over said internet network an authorization token, an issuer's **digital certificate**, said wallet initiation message, and a reference to said consumer's credit or debit card...

...to a consumer's computer, a merchant message including a wallet initiation message, a merchant **digital signature**, and a **digital certificate** from an acquiring bank, said wallet initiation message including a payment amount, an order description...

...then authorizing payment by sending over said internet network an authorization token, an issuer's **digital certificate**, said wallet initiation message, and a reference to said consumer's credit or debit card...

...to a consumer's computer, a merchant message including a wallet initiation message, a merchant **digital signature**, and a **digital certificate** from an acquiring bank, said wallet initiation message including a payment amount, an order description...

...then authorizing payment by sending over said internet network an authorization token, an issuer's **digital certificate**, said wallet initiation message, and a reference to said consumer's credit or debit card...

...to a consumer's computer, a merchant message including a wallet initiation message, a merchant **digital signature**, and a **digital certificate** from an acquiring bank, said wallet initiation message including a payment amount, an order description...

...then authorizing payment by sending over said internet network an authorization token, an issuer's **digital certificate**, said wallet initiation message, and a reference to said consumer's credit or debit card...

...message containing consumer identity and authentication information, payment amount, an order description, a timestamp, a **digital certificate** representing a merchant, and a **digital certificate** representing the merchant's acquiring bank; said merchant's **digital certificate** containing a merchant identifier unique for the acquiring bank; said acquiring bank's **digital certificate** containing a bank identifier unique among all banks sharing a common financial arrangement; validating at...

...then authorizing payment by sending over said internet network an authorization token, an issuer's **digital certificate**, and a reference to said consumer's credit or debit card number; said authorization token ...

...payment amount, order description, timestamp, a random nonce, said merchant identifier from the merchant's **digital certificate**, and said acquiring bank identifier from said acquiring bank's **digital certificate**, plus a reference to the consumer's credit or debit card number; said authorization token...

...embodiment the consumer identity and authentication information may be a userid and a password, an **ATM** debit card number and PIN, a smart card's account number and a symmetric Message Authentication Code (MAC), a smart card's account number and an asymmetric **digital signature**, a consumer's **digital signature** and **digital certificate**, a consumer's **digital certificate** and matching asymmetric **digital signature**, a user account number and a symmetric MAC or asymmetric **digital signature**, a user account number and an asymmetric **digital signature**, or a consumer's biometric signal.

In the preferred embodiment there is a **digital certificate** hierarchy that covers issuing banks, acquiring banks, and merchants. The certificate hierarchy is used with public-key **digital signatures** to identify said merchant and said issuing bank. The certificates represent common financial agreements and...the consumer's computer with a merchant message including a wallet initiation message, a merchant **digital signature**, and a **digital certificate** from an acquiring bank. The wallet initiation message includes a payment amount, an order description ...

...then authorizes payment by sending over the internet network an

unique for the acquiring bank (208);
 said acquiring bank's **digital certificate** containing a bank identifier unique among all banks sharing a common financial arrangement;
 validating at...

...authorizing payment by sending over said internet network an authorization token (254), an issuer's **digital certificate**, and a reference (252') to said consumer's credit (250) or debit card number;
 said...

...payment amount, order description, timestamp, a random nonce, said merchant identifier from the merchant's **digital certificate**, and said acquiring bank identifier from said acquiring bank's **digital certificate**, plus a reference to the consumer's credit or debit card number;
 said authorization token...

...to a consumer's computer, a merchant message including a wallet initiation message, a merchant **digital certificate**, and a **digital certificate** from an acquiring bank, said wallet initiation message including a payment amount, an order description...

...of claim 19, which further comprises:
 including with the wallet initiation message a merchant's **digital signature** of the wallet initiation message;
 including the wallet initiation message and said merchant's **digital signature** in the authorization request message;
 verifying at said issuer gateway said merchant's signature to...

...merchant claims payment through the acquiring bank by forwarding the authorization token and issuer's **digital certificate** to the acquiring bank;

the acquiring bank verifying the issuer's signature on the authorization token, validating the issuer's **digital certificate**, checking for duplicates via the timestamp in the authorization token; and the acquiring bank paying...

18/3,K/4 (Item 1 from file: 349)
 DIALOG(R)File 349:PCT FULLTEXT
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01199547 **Image available**

SECURE SYSTEM FOR CONDUCTING POSTAL SERVICE TRANSACTIONS AND METHOD FOR USE THEREOF

SYSTEME SECURISE POUR EFFECTUER DES TRANSACTIONS DE SERVICE POSTAL ET PROCEDE D'UTILISATION CORRESPONDANT

Patent Applicant/Assignee:

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 (Residence), US (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

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 (Residence), US (Nationality), (Designated only for: US)

Legal Representative:

NEUNER George W (agent), Edwards & Angell, LLP, P.O. Box 9169, Boston, MA 02209, US,

Patent and Priority Information (Country, Number, Date):

Sylvia Keys

15-Jun-05 03:45 PM

Patent: WO 200506155 A2-A3 20050120 (WO 0506155)
Application: WO 2004US7081 20040307 (PCT/WO US04007081)
Priority Application: US 2003478985 20030614; US 2003492774 20030804; US
2003499761 20030902; US 2003500897 20030904; US 2003504913 20030922; US
2003506115 20030925

Designated States:

(All protection types applied unless otherwise stated - for applications
2004+)

AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM
DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC
LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO
RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PL PT RO
SE SI SK TR
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
(AP) BW GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 11034

Main International Patent Class: G06F-017/60

Fulltext Availability:

Detailed Description

English Abstract

Featured are systems and methods for creating **digital signatures**.
More particularly, there is featured a method for facilitating online
commerce including issuing an electronic...

Detailed Description

... S. Provisional Patent Applications

60/478985 ffiled 6/14/03 entitled "Secure System for Processing **Digital Signatures** and Method for Use Thereof," 60/492,774 filed 8/04/03
entitled "Secure System for Processing **Digital Signatures** Using Clock
Signal Activation and Private Key Transfer," 60/499,761 filed 9/02/03
entitled "Secure System for Processing **Digital Signatures** Using Clock
Signal Activation and Secret Key Transfer," 60/500,897 filed 9/04/03
entitled "Secure System for Processing **Digital Signatures** Using Clock
Signal Activation and Secret Key Transfer,"
60/504,913 filed 9/22/03 entitled "Secure System for Processing **Digital Signatures** Using System Clock Activation and Secret Key Transfer, and
60/506,115 filed 9/25/03 entitled "Secure System for Processing **Digital Signatures** and Method for Use Thereof."

FIELD OF INVENTION

The present invention is related to a...

...embodiments.

The invention is also not to be limited by use of the description "user
digital signature" and may in fact be implemented on behalf of
entities other than individual users (e...

...or debit card, checking, social security, business customer account,
etc.) and also as a user **digital signature**. For transactions
involving the delivery of deliverable items (e.g. letters and packages),
the invention further provides for various embodiments in which the user
digital signature is able to be printed or affixed to and machine
readable from preprinted stamps, labels...

ssendorf. This is distinguished from automated teller machines (**ATM**) although for the purpose of the present invention it is possible that the two functions...

...number (e.g. credit or debit card number) functioning as an accountholder (e.g. cardholder) **digital signature** 80 l. Also shown is the preferred method of expressing the encoded formed from the...

...be required to present some form of verifiable personal identification (e.g. credit, debit or **ATM** card, drivers license, passport, social security card, bio-metric information, user ID, password, etc.) at... debit card number) as a TIN capable of functioning as an accountholder (e.g. cardholder) **digital signature** in which the authenticating party is the card issuer or card issuer agent (e.g...

18/3,K/5 (Item 2 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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01188195

SYSTEM AND METHOD FOR SUPPLYING AND MANAGING USAGE RIGHTS ASSOCIATED WITH AN ITEM REPOSITORY
SYSTEME ET PROCEDE DE FOURNITURE ET DE GESTION DE DROITS D'UTILISATION ASSOCIES A UN ORGANE D'ARCHIVAGE D'ARTICLES

Patent Applicant/Assignee:

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Legal Representative:

VILLAMAR Carlos R (et al) (agent), Nixon Peabody LLP, 401 9th Street, N.W., Washington, DC 20004, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 2004109450 A2 20041216 (WO 04109450)

Application: WO 2004US17023 20040601 (PCT/WO US04017023)

Priority Application: US 2003452928 20030603

Designated States:

(All protection types applied unless otherwise stated - for applications 2004+)

AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM
DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC
LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO
RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PL PT RO
SE SI SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) BW GH GM KE LS MW MZ NA SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 28524

Main International Patent Class: **G06F**

Fulltext Availability:

Detailed Description

Detailed Description

... can be configured, to be tamper resistant and can include the set of public and **private keys** II 2 issued by the activation server I I 0 as well as other components...

...ticket specification designating an associated item ticket 134. The license 142 also can include a **digital signature** 142c, including any suitable cryptographic keys, and the like, for unlocking item ticket 134.

[00391...

...configured to include the capability to verify and validate the signature 142c, such as a **cryptographic signature** or other identifying characteristic of the license 142, using any suitable mechanisms, algorithms or techniques...Patent No. 6,336,971. In an exemplary embodiment, a digital ticket can include a **digital token**, and the like, possession of which can be a condition for exercising a manner of ...acceptance areas and ease of use for customers, for example, similar to Automated Teller Machine (**ATM**) cards and banks. After honoring the item tickets 134, the theater owner, for example, can...

18/3,K/6 (Item 3 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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01187304 **Image available**

SECURE PIN MANAGEMENT

GESTION SECURISEE D'UN PIN

Patent Applicant/Assignee:

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(Residence), US (Nationality)

Patent Applicant/Inventor:

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Legal Representative:

HOWISON Gregory (et al) (agent), Howison Arnott, L.L.P., P.O. Box 74715,
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Patent and Priority Information (Country, Number, Date):

Patent: WO 2004109426 A2 20041216 (WO 04109426)

Application: WO 2003US27704 20030904 (PCT/WO US03027704)

Priority Application: US 2002408122 20020904

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC SD
SE SG SK SL SY TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW

(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE
SI SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 6175

Patent Applicant/Assignee:

ATM ONLINE INC...

Main International Patent Class: **G06F**

Fulltext Availability:

Detailed Description

English Abstract

...manager uses the PIN block and transaction data to send a transaction request to the **ATM** Network.

French Abstract

...bloc PIN et les donnees de transaction pour envoyer une demande de transaction au reseau **ATM** .

Detailed Description

... in the nature of on-line credit card transactions.

0

[00041 On the other hand, **ATM** or Debit card transactions, where the transaction has been verified with a PIN can not...

...the EFT network is governed by rules designed to safeguard the various parties in an **ATM** transaction. In particular, the security of the PIN 5 is subject to strict controls. Most proposals to introduce the advantages of **ATM** transactions to the on-line environment, however, fail to adequately protect the PIN from being...

...manager uses the PIN block and transaction data to send a transaction request to the **ATM** Network.

BRIEF DESCRIPTION OF THE DRAWINGS

[00081 For a more complete understanding of the present...

...in association with bank debit cards. Bank debits cards are used at automated teller machines (**ATM**) connected to the **ATM** Network. When the customer presents the card to the **ATM** , the **ATM** prompts the customer to enter a PIN. The customer enters the PIN into the **ATM** . The **ATM** processes the PIN and data read from the bank debit card to identify the customer...

...legitimate owner of the card. The process for PM-based transactions with debit cards at **ATM** is heavily regulated.

[00141 For purposes of the disclosure, a PIN may be any sequence...

...used to identify, particularly where the identification is part of a transaction. Inasmuch as the **ATM** Network has specific requirements, the preferred embodiment is tailored to that use. It will be...

...money is transferred from a customer bank account at a financial institution 120 via the **ATM** network 1 1 8 is selected, the transaction is initiated, typically by a transaction initiation...

...00231 The executable code injected into the HSM 1 14 is typically authenticated using a **digital signature** of the executable code generated by an authorized publisher. Other authentication methods may be used...

...publisher. Authentication of the trusted code and trusted publisher is typically achieved using an appropriate **digital signature**

authentication protocol.

100271 The HSM 114 may be programmed to refuse to load trusted code during key loading processes. The HSM 114 may be programmed to restrict code loading...

...To make the HSM 114 compliant with X9 requirements, the programmed HSM 114 requires that **private keys** and symmetric keys exist in an acceptable secure format. The keys may be rendered as...
...typically require a trusted code source and use executable code that is authenticated, through a **digital certificate**, hash, MAC or other methodology sufficient to prove the authenticity and integrity of the executable...

...1.5 may support both EMV for smart card support, debit cards, credit cards, and **ATM** cards.

[00361

The HSM interface 1.0 may be both physically and electronically secure, and may contain an integral security module, with an encryption chip, that offers...

...by a secure line connection, to a closed network 1.1.8 such as the **ATM** Network. This closed network 1.1.8 provides communication to one or more financial institutions...

...transfer of monies from one account to another is performed by communications transmitted through the **ATM** Network 1.1.8.

100391 In typical prior art systems, using software-based cryptography, all of...

...encrypted data. In addition a duplicated asymmetric private key allows an adversary to falsely generate **digital signatures** that would be attributed to the computer owner. A substituted or modified public key would...

...well as references to the key generation procedural documentation including key storage and backup. Asymmetric **private keys** and symmetric keys remain secret and their integrity, authenticity and recovery practices may be retained...

...request including the PIN block in step 244 and sends the transaction request to the **ATM** Network 1.1.8.

The **ATM** Network 246 or the financial institution 120 authenticates the PIN in step 246. The financial... at function block 354. The transaction manager 102 then sends the transaction message to the **ATM** Network 118 at function block 356. The **ATM** Network 1.1.8 sends an authorization request to the Financial Institution 120 at function block...

18/3,K/7 (Item 4 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

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01144698 **Image available**

SECURE SYSTEM FOR DIGITAL SIGNATURES AND METHODS FOR USE THEREOF
SYSTEME SECURISE POUR SIGNATURES NUMERIQUES ET PROCEDURE D'UTILISATION

Patent Applicant/Assignee:

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Patent Applicant/Inventor:

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(Residence), US (Nationality), (Designated only for: US)

Legal Representative:

DALEY William J Jr (agent), Edwards & Angell, LLP, P.O. Box 9169, Boston,
MA 02209, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200466109 A2-A3 20040805 (WO 0466109)

Application: WO 2004US685 20040112 (PCT/WO US04000685)

Priority Application: US 2003442445 20030116; US 2003440989 20030119; US
2003441529 20030121; US 2003442444 20030125; US 2003478985 20030614; US
2003504913 20030922

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(All protection types applied unless otherwise stated - for applications
2004+)

AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM
DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC
LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO
RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE
SI SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) BW GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 13958

SECURE SYSTEM FOR DIGITAL SIGNATURES AND METHODS FOR USE THEREOF

Main International Patent Class: **G06F-017/60**

Fulltext Availability:

Detailed Description

English Abstract

Featured are systems and methods for creating **digital signatures** .
More particularly, there is featured a method for facilitating online
commerce including issuing an electronic...

Detailed Description

**SECURE SYSTEM FOR DIGITAL SIGNATURES
AND METHODS FOR USE THEREOF**

This application claims as priority U.S. Provisional Patent Applications
60/415991 filed 10/5/02 entitled "System and Method for Creating and
Processing **Digital Signatures** Using Intelligent Authorization,"
60/439577 filed 1/1 1/03 entitled
"Secure System for Processing..."

...Method for Use Thereof,"

60/478985 filed 6/14/03 entitled "Secure System for Processing **Digital
Signatures** and Method for Use Thereof," 60/492774 filed 8/04/03 entitled
"Secure System for Processing **Digital Signatures** Using Clock Signal
Activation and Private Key Transfer," 60/499761 filed 9/02/03 entitled
"Secure System for Processing **Digital Signatures** Using Clock Signal
Activation and Secret Key Transfer," and 60/ filed 9/04/03 entitled
"Secure System for Processing **Digital Signatures** Using Clock Signal
Activation and Secret Key Transfer," and 60/ filed 9/25/03 entitled
"Secure

System for Processing **Digital Signatures** and Method for Use Thereof."
FIELD OF INVENTION

A system and method for creating and processing **digital signatures** .

18/3,K/8 (Item 5 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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01115786 **Image available**

METHOD OF DIGITAL CERTIFICATE (DC) COMPOSITION, ISSUANCE AND MANAGEMENT
PROVIDING MULTITIER DC DISTRIBUTION MODEL AND MULTIPLE ACCOUNTS ACCESS
BASED ON THE USE OF DC AND PUBLIC KEY INFRASTRUCTURE (PKI)
PROCEDE DE COMPOSITION, D'EMISSION ET DE GESTION D'UN CERTIFICAT NUMERIQUE
(DC) FOURNISSANT UN MODELE DE DISTRIBUTION DC PLURI-ETAGE ET UN ACCES A
DES COMPTES MULTIPLES AU MOYEN DUDIT CERTIFICAT NUMERIQUE ET D'UNE
INFRASTRUCTURE A CLES PUBLIQUES (ICP)

Patent Applicant/Assignee:

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RU (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

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RU (Residence), RU (Nationality), (Designated only for: US)

Patent and Priority Information (Country, Number, Date):

Patent: WO 200438528 A2-A3 20040506 (WO 0438528)

Application: WO 2003IB5326 20031023 (PCT/WO IB03005326)

Priority Application: WO 2002RU462 20021023; WO 2003IB634 20030124; WO
2003IB2045 20030416

Designated States:

(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK
LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC
SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE
SI SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 37736

METHOD OF DIGITAL CERTIFICATE (DC) COMPOSITION, ISSUANCE AND MANAGEMENT
PROVIDING MULTITIER DC DISTRIBUTION MODEL AND MULTIPLE ACCOUNTS ACCESS
BASED...

Main International Patent Class: G06F-017/60

International Patent Class: G06F-157:00

Fulltext Availability:

Detailed Description

Claims

Detailed Description

Method Of **Digital Certificate** (DC) Composition, Issuance And
Management Providing Multitier DC Distribution Model And Multiple
Accounts Access Based...

...available. Secure communications between parties may then be enabled by
using the parties'public and **private keys** .

The use of public key cryptography addresses many of the inherent
security problems in an...

...these two problems. In one common approach, the public key management

infrastructure is based on **digital certificates** , which are used to associate a certain public key to a certain entity with some degree of integrity.
The public key management infrastructure typically would include a database of **digital certificates** , and various operations are provided in order to access and maintain this database.

For example, requests for new **digital certificates** are processed, **digital certificates** are revoked, and the status of existing **digital certificates** is designated and checked.

The closest art known is as follows.

US Patent 6,151...

...FONIA and unified communication and messaging.

US Patent 6,324,645, VeriSign discloses use of **digital certificates** , but does not detail the use of certificates for web-enabled devices; secure purchase and...

...Another particularly advantageous embodiment of the invention provides a method which includes issuing a temporary **Digital Certificates** containing UTA for use in at least one Temporary Target (TT), the TT serving as...

...line audio and video streams; and each Target issuing new pair of shorter public and **private keys** , storing the private key in an internal memory of the Target, the private key being...data provided by third parties such as Microsoft Passport or VeriSign certificates etc.

CA (Switch) **Digital Certificate** (preferably includes all PNF fields with permanent values)

Authorized privileges for Public key cryptography (preferably...

...key encryption infrastructure (PKI) and procedures, it can generate Certificate Signature Request (CSR), Public and **Private keys** , search, retrieve, receive and store **Digital Certificate** issued by Certification Authority (CA). It can also operate within PKI operating as Mover or...

...key encryption infrastructure (PKI) and procedures, it can generate Certificate Signature Request (CSR), Public and **Private keys** , search, retrieve, receive and store **Digital Certificate** issues by Certification Authority (CA). It can also operate within PKI operating as Mover or...

...data management engine at SA site.

Certification Authority. CA is an central PKI authority, providing **Digital Certificates** for UTA Number Files and related SSL services. The CA is preferably the SA.

Switch...

...Kerberos (<http://www.ietf.org/html.charters/kib-wg-charter.html>);
Cryptographic Message Syntax (CMS);
other

Digital certificates , encryption issues: Internet X.509 certificates
PKI can be used in conjunction with IETF "Use...

While various implementations of methods of **Digital Certificate** (DC) composition, issuance and management providing multitier DC distribution model and multiple accounts access based...

Claim

... comprising said payee network identifier and said DCF network identifier is
93
obtained from a **digital certificate** of the, said **digital certificate** being a source of trusted mapping information for deployment of a resolution database.

7 The...

...resolution fee schedules.

95

. The transactional communication method as claimed in claim 1, wherein a **Digital Certificate** (DC) comprising at least network identifier and its Default Clearing Facility network identifier of a...

18/3,K/9 (Item 6 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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01073122 **Image available**

SYSTEM AND METHOD FOR SUPPLYING AND MANAGING RIGHTS EXPRESSIONS

SYSTEME ET PROCEDE DE FOURNITURE ET DE GESTION D'EXPRESSIONS DE DROITS

Patent Applicant/Assignee:

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Patent and Priority Information (Country, Number, Date):

Patent: WO 2003102736 A2-A3 20031211 (WO 03102736)

Application: WO 2003US17265 20030603 (PCT/WO US03017265)

Priority Application: US 2002159272 20020603; US 2002162212 20020605

Designated States:

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AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SC SD SE SG
SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW

(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE
SI SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 30453

Main International Patent Class: G06F-017/60

Fulltext Availability:

Detailed Description

Detailed Description

... can be configured to be tamper resistant and can include the set of public and **private keys** 1 12 issued by the activation server I 1 0 as well as other components...

...ticket specification designating an associated item ticket 134. The license 142 also can include a **digital signature** 142c, including any suitable cryptographic keys, and the like, for unlocking item ticket 134.

[00391...

...configured to include the capability to verify and validate the signature 142c, such as a **cryptographic signature** or other identifying characteristic of the license 142, using any suitable mechanisms, algorithms or techniques...Patent No. 6,336,971. In an exemplary embodiment, a digital ticket can include a **digital token**, and the like, possession of which can be a condition for exercising a manner of ...acceptance areas and ease of use for customers, for example, similar to Automated Teller Machine (**ATM**) cards and banks. After honoring the item tickets 134, the theater owner, for example, can...

18/3,K/10 (Item 7 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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01050145

SYSTEM AND METHOD FOR DEALING WITH LOYALTY PROGRAM POINTS

SYSTEME ET PROCEDE DE GESTION DE POINTS DE PROGRAMME DE FIDELISATION

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200379245 A2 20030925 (WO 0379245)

Application: WO 2003CA370 20030314 (PCT/WO CA0300370)

Priority Application: US 2002364084 20020315

Designated States:

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AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SC SD SE SG
SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE
SI SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Sylvia Keys

15-Jun-05 03:53 PM

Fulltext Word Count: 8427

Main International Patent Class: G06F-017/60

Fulltext Availability:

Detailed Description

Detailed Description

... points in each account.

It would be updated once it accessed a POS, card reader, **ATM** or other transaction processor that was Clearinghouse network enabled:

Rules based programming interfaces would allow...in live use. The Gateway Service will enroll a settlement points network certificate authority for **digital certificates** and digital encryption. These will be used for establishing mutually authenticated and secure communications sessions and for adding **digital signatures** to messages and files sent to the Clearinghouse. A Certificate authority houses the private and...

...with multiple levels of protection such that no single individual can gain access to the **private keys**. The certificate authority will also maintain a certificate revocation list containing any previous certificates that...

18/3,K/11 (Item 8 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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01043348 **Image available**

METHOD AND SYSTEM FOR GETTING ON-LINE STATUS, AUTHENTICATION, VERIFICATION, AUTHORIZATION, COMMUNICATION AND TRANSACTION SERVICES FOR WEB-ENABLED HARDWARE AND SOFTWARE, BASED ON UNIFORM TELEPHONE ADDRESS

PROCEDE ET SYSTEME D'OBTENTION EN LIGNE D'ETATS, ET DE SERVICES D'AUTHENTIFICATION, VERIFICATION, AUTORISATION, COMMUNICATION ET TRANSACTIONS A L'AIDE D'EQUIPEMENTS ET DE LOGICIELS RELIES AU WEB, ET SE BASANT SUR DES ADRESSES TELEPHONIQUES UNIFORMISEES

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200373337 A1 20030904 (WO 0373337)

Application: WO 2003IB634 20030124 (PCT/WO IB0300634)

Priority Application: US 200285717 20020227; US 2002233426 20020904; WO 2002RU462 20021023

Designated States:

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AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SC SD SE SG
SK SL TJ TM TN TR TZ UA UG US UZ VC VN YU ZA ZM ZW
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT SE SI

SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

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Fulltext Word Count: 44988

Main International Patent Class: G06F-017/60

Fulltext Availability:

Detailed Description

Claims

Detailed Description

... available. Secure communications between parties may then be enabled by using the parties'public and **private keys** .

The use of public key cryptography addresses many of the inherent security problems in an...these two problems. In one common approach, the public key management infrastructure is based on **digital certificates** , which are used to associate a certain public key to a certain entity with some degree of integrity. The public key management infrastructure typically would include a database of **digital certificates** , and various operations are provided in order to access and maintain this database. For example, requests for new **digital certificates** are processed, **digital certificates** are revoked, and the status of existing **digital certificates** is designated and checked.

The closest art known is as follows.

US Patent 6,151...

...FOMA and unified communication and messaging.

US Patent 6,324,645, VeriSign discloses use of **digital certificates** , but does not detail the use of certificates for web-enabled devices; secure purchase and...Another particularly advantageous embodiment of the invention provides a method which includes issuing a temporary **Digital Certificates** containing UTA for use in at least one Temporary Target (TT), the TT serving as...line audio and video streams; and each Target issuing new pair of shorter public and **private keys** , storing the private key in an internal memory of the Target, the private key being... data provided by third parties such as Microsoft Passport or VeriSign certificates etc.

CA (Switch) **Digital Certificate** (preferably includes all PNF fields with permanent values)

Authorized privileges for Public key cryptography (preferably...key encryption infrastructure (PKI) and procedures, it can generate Certificate Signature Request (CSR), Public and **Private keys** , search, retrieve, receive and store **Digital Certificate** issued by Certification Authority (CA).

It can also operate within PIU operating as Mover or...key encryption infrastructure (PKI) and procedures, it can generate Certificate Signature Request (CSR), Public and **Private keys** , search, retrieve, receive and store **Digital Certificate** issues by Certification Authority (CA).

It can also operate within PKI operating as Mover or...

18/3,K/12 (Item 9 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00979153 **Image available**

A DISTRIBUTED NETWORK SYSTEM USING BIOMETRIC AUTHENTICATION ACCESS
SYSTEME DE RESEAU DISTRIBUE UTILISANT UN ACCES D'AUTHENTICATION BIOMETRIQUE

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200309111 A2-A3 20030130 (WO 0309111)
Application: WO 2002IE95 20020702 (PCT/WO IE02000095)
Priority Application: EP 20016500878 20010718; US 2001305864 20010718

Designated States:

(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS
LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL
TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LU MC NL PT SE SK TR
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 16861

Main International Patent Class: G06F-001/00

Fulltext Availability:

Detailed Description

Claims

Detailed Description

... engine. The authentication engine authenticates the service provider through whom the request is sent, using **digital signatures**, shared secrets, IP addressing, or other techniques known in the art. Associated with a user...evault so as to obtain user specific information or otherwise, on the basis of traditional **digital signatures** or other methods as will be apparent to those skilled in the art. Following a...automatic voice recognition system, Web interface, e-mail, mobile, frontdesk, point-of-sale, and kiosk/ **ATM**. A voice communications device, such as a traditional telephone, a mobile phone, or a PC...used to effect payments and gather loyalty points using a biometric. A biometrically-enabled kiosk or **ATM** is a self-service interface for ...authentication engine, while the e-vault will authenticate to the SP using a public-key **digital signature**. The SP authentication- need not involve the authentication engine. Effectively the e-vault data is...

Notation

The notation PKx and SKx are used to represent an entity Vs public and **private keys** respectively, using a public key algorithm. JMjPKx is used to represent encryption of a message...

...encryption using Xs private key. Encryption with a private key is assumed to produce a **digital signature**, such as with the RSA algorithm. However any public-key cryptosystem,, capable of providing **digital signatures** may be used. In the actual finplementation, for efficiency purposes, a hash of the message is signed, rather than the full message, to produce the **digital signature**, although this is not shown here. The notation 1 5 H(X) is used to...be that customer. This is because the system does not provide a non-repudiable customer **digital signature**, but only a customer authentication.

To prevent an attack by an entity that has obtained...this is not required SSL or IP'Sec alone could be used, without need for **digital signatures**.

User approved information can be passed from their e-vault to' specific SPs.

The information...to a cross-marketing offer.

The following are important aspects of privacy in interactions.

1. **Digital signatures** for non-repudiation of message sender
2. Public-key encryption of template to minimize accessibility... transport or network layer respectively. This prevents network eavesdroppers from seeing any of the communications.

Digital signatures .

A **digital signature**, [XISKspi, is used to show that the message X came from SP1 and this ...to the customer, as part of the SSL set-up protocol, using an SP SSL **digital certificate**.

Although described with reference to SSL it will ...an XML document, and follows the secure application protocol specified earlier. Each encrypted block or **digital signature**, forms a different sub-element of the overall XML message. For example, the encrypted biometric template forms one block component. The World Wide Web Consortium (W3C) XML **digital signature** specification and XML encryption recommendation are followed in a preferred implementation.

The type and content...

...security may be relaxed.

This can be done by using lightweight cryptography instead of full **digital signatures** and ...of both (multi-modal), through an authentication engine. Traditional mechanisms such as PINs, passwords, public/ **private keys**, and hardware tokens may also be used with the authentication engine, in combination with biometrics...

Claim

... user through an authentication engine,

the network is adapted to enable the construction of user **digital signature** using the document hash and a server-stored user signing key.
I 0

22 The...

18/3,K/13 (Item 10 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00939235 **Image available**

SYSTEM AND METHOD FOR PROVIDING SECURE TRANSACTIONS

SYSTEME ET PROCEDE PERMETTANT DE FOURNIR DES TRANSACTIONS SECURISEES

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200273364 A2-A3 20020919 (WO 0273364)

Application: WO 2002US7657 20020312 (PCT/WO US0207657)

Priority Application: US 2001275074 20010312

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI
SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 8764

Main International Patent Class: G06F-017/60

International Patent Class: G06F-011/00

Fulltext Availability:

Detailed Description

Detailed Description

... to confirm the identity of the

business, and be able to attach a legal trail (**digital signature**) to those identities. Furthermore, financial and insurance service providers will require positive confirmation of a...such as a bid, offer, Web site or page, or or RFP via

a cryptographic **digital signing** process.

Digital signatures are only as worthwhile as the level of authentication that occurs when a signature key...

...multiple layers of identity
confirmation data compilation.

Figure 5 depicts a block diagram showing the **digital signing** process according to the present invention.

Figure 6 depicts a block diagram showing the credential local area network ("LAN"), a wide area network ("WAN"), a wireless (e.g., **ATM**) network, a logical network within a single computer, some other form of programmatic communication such...

...contemplated that the invention can be implemented utilizing the same functions, processes, and data without **digital signing**.

The components include.

The Trust Warehouse: A comprehensive database of corporate profiles containing a combination...

...the data.

12

TrustWatch: A downloadable client program that can be enabled to hold the **private keys** of business representatives, displays True Credentials, detects embedded XML signed content, detects XML signature requests...setup and manage representatives of the business. At enrollment the Trust Administrator is issued a **digital certificate** that is used to gain access to the Administrative section. Each representative is issued a key pair/ **digital certificate** for **digital signing**.

True Record: A highly secure storage location for digital receipts (Digital Receipt Vault) and a...

...subset of the True Credential information

With True Identity for electronic marketplaces TrustWatch offers secure **digital signing** of buyer and seller commitments, local storage of these digitally signed documents, verification of digitally...

...optionally),

and finally transmits the signed offer to the electronic marketplace. See Figure 5

Viewing **digital signatures** and their corresponding True Credentials is a similar process. The electronic marketplace transmits the signed...

...the True Credential of the

signer's company The Trust identifier is stored in the **digital certificate** of the signer to facilitate requesting the TrueCredential of the signer. The process of verifying a **digital signature** is essentially the reverse of the original signing. A hash of the document that has been signed is

compared to the decrypted hash in the **digital signature** . The **digital signature** is decrypted using the signer's ...the method of the present invention the public key is available via the signer's **digital certificate** which is referenced by and XML tag within the signature. See Figure 6, TrustWatch displaying...

...keystore, and sends the public key up to Trust Authority to be bundled into a **digital certificate** . A key pair is, the private and public key, used for **digital signing** and access to secure web pages. This is a Public Key Infrastructure (PKI) term. A **digital certificate** is a wrapper around a public key that has been digitally signed by a Certificate...

...within 24 hours, giving him/her information on how and where to pick up their **digital certificate** .

Based on the information provided initially by the Trust Administrator, the Trust Authority routes a...
...terminology, a Registration authority has the right to do the registration aspects of issuing a **digital certificate** under strict guidelines for a Certificate Authority by having a registration switch the Trust Authority...

...Administrator is authenticated he/she is emailed a unique URL to pick up his/her **digital certificate** The Trust Administrator goes to the site and downloads the certificate to a keystore on...

...set up participants (or other Trust Administrators) quickly and easily
Setting up Participants
Using the **digital certificate** received in the process described above the Trust Administrator can now set up participants. This...

...This happens as a continuous process with the result being a private key and a **digital certificate** for the participant stored in the participants local keystore. Once this has occurred the participant...to dispute resolution services based on a True Record.

1 5

Whenever a Trust Authority **digital signature** is created or encountered by a TrustWatch user there is an option of transmitting this...

18/3,K/14 (Item 11 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00939218 **Image available**
AUTOMATED TRANSACTION MACHINE DIGITAL SIGNATURE SYSTEM AND METHOD
SYSTEME ET PROCEDE DE SIGNATURE NUMERIQUE PAR MACHINE DE TRANSACTION
AUTOMATIQUE
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Legal Representative:

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200273341 A2-A3 20020919 (WO 0273341)

Application: WO 2002US6826 20020306 (PCT/WO US0206826)

Priority Application: US 2001273996 20010307; US 2001319015 20011129

Designated States:

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BR CA CN CO IN MX PL RU ZA

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

Publication Language: English

Filing Language: English

Fulltext Word Count: 20881

AUTOMATED TRANSACTION MACHINE DIGITAL SIGNATURE SYSTEM AND METHOD

Main International Patent Class: **G06F-017/60**

Fulltext Availability:

Detailed Description

Claims

English Abstract

An automated transaction machine such as an **ATM** (10) is provided. The **ATM** is operative to digitally sign electronic documents (42). The **ATM** may be in operative connection with a storage server (32). The storage server is operative responsive to the **ATM** to maintain electronic documents (42) in a data store (34) in association with the user's...

...user in association with the user's digital safe deposit account and/or financial account. The **ATM** is operative to cause electronic documents to be signed using the private key associated with the user. The **ATM** is further operative to output the electronic document on a display device (18) of the **ATM** where the user may view and edit the electronic document.

Detailed Description

AUTOMATED TRANSACTION MACHINE

DIGITAL SIGNATURE SYSTEM AND METHOD

TECHNICAL FIELD

This invention relates to automated transaction machines. Specifically this invention...

...When signing all electronic document an individual uses a secret private key to generate a **digital signature** for the electronic document. Such a private key is generally associated with a public key. Another party may use the public key to authenticate the electronic document and **digital signature**.

Such public keys are often distributed as part of a **digital certificate** which is digitally signed by a trusted third party certificate authority.

Although the **digital certificate** and public key may be publicly disclosed to the world, the private key must remain...
...encryption software, many individuals do not have the technical skill to

successfully install and use **digital signature** programs on their personal computers. Consequently there exists a need for a system and method...

...digitally signing electronic documents which can be easily employed by individuals.

In general, when a **digital signature** program belongs to a person using the program, that person may have reasonable assurance that...

...0 the electronic document that was read and reviewed by the person.

Unfortunately, if the **digital signing** program belongs to an untrusted party, the individual has very little assurance that a private...

...result there exists a need for a system and method of protecting the confidentiality of **private keys** used to digitally sign electronic documents.

There also exists a need to provide a system...

...of the present invention to provide a system and method of protecting the confidentiality of **private keys** used to digitally sign electronic documents.

It is a farther object of an exemplary form...

...system and method of digitally signing electronic documents which provides finther assurance to individuals that **digital signing** of electronic documents is a safe substitute for signing paper documents.

Further objects of exemplary...

...may be used by individuals or users with exemplary embodiments includes an automated teller machine (" **ATM** ").

ATMs enable customers to carry out banking transactions. Common banking transactions that may be carried...stamps, money orders, scrip or travelers checks. For purposes of this disclosure references to an **ATM** , an automated transaction machine, or an automated banking machine shall encompass any device which carries out transactions including transfers of value.

An exemplary embodiment of the **ATM** may include at least one output device such as a display screen, audio system, and printer. The **ATM** may also include at least one input device such as a touch screen, function keys, keypad, keyboard, and/or card reader. The **ATM** may ftirther include devices such as a dispenser mechanism for sheets of currency, a receipt ...

...that are used by the machine in carrying out transactions including transfers of value.

The **ATM** may include or be in operative comiection with at least one computer. The computer may...

...amount of file storage space maintained by a storage server in operative connection with the **ATM** .

18/3,K/15 (Item 12 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00891383 **Image available**

**A COMPUTERIZED METHOD AND SYSTEM FOR A SECURE ON-LINE TRANSACTION USING
CARDHOLDER AUTHENTICATION**

**PROCEDE ET SYSTEME INFORMATISES POUR L'ETABLISSEMENT DE TRANSACTIONS EN
LIGNE SECURISEES PAR AUTHENTIFICATION DES DETENTEURS DE CARTES**

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200225495 A1 20020328 (WO 0225495)

Application: WO 2000US25852 20000921 (PCT/WO US0025852)

Priority Application: WO 2000US25852 20000921

Designated States:

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prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE
ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT
LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM
TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 22442

Main International Patent Class: G06F-017/30

Fulltext Availability:

Detailed Description

Claims

English Abstract

...120). The advantages of this method and system includes decreasing the
need for issuance of **digital certificates**, maintenance of customer
loyalty reward programs, ability to use on-line purchasing sites that
require...

Detailed Description

... encryption of the credit card data before it travels over the Internet
and the use **digital certificates** to identify the consumer. However,
encryption algorithms may be broken. **Digital certificates** often
require a large certificate hierarchy and add complexity to the

transaction. An additional risk...a username, a password, a pass phrase, a personal identification number; a digitally signed message, **digital certificates**, a cryptogram, smart card-originated authentication information, an electronic address of the cardholder's processor...to the merchant and consumer. In addition, the present invention does not require issuance of **digital certificates** to cardholders, thereby eliminating the need for a large certificate hierarchy. However, if such **digital certificates** or other cardholder authentication mechanisms such as "smart cards" are desired by the issuing bank...any type of payment card such as a credit card, checking card, debit card, or **automatic teller machine (ATM)** card. In addition, the payment card can be either virtual, or physical. The term virtual...issuing bank during the purchase transaction.

One method involves the use of public key cryptography, **digital signatures**, and **digital certificates**. For example, during the registration process, software on the cardholder computer would generate a pair of mathematically-related keys known as public and **private keys**. The public key is transmitted along with one-time authentication information to a third party...

...signs the key and sends it to the cardholder software in the form of a **digital certificate**.

Typically, the password comprises a series of alphanumeric characters optionally supplemented by non-alphanumeric characters...

...password, the

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username of the cardholder, the secret PIN, a digitally signed message with **digital certificates**, a serial number of the cardholder's CPU processor, a serial number associated with the...key shared between the merchant and the issuing bank, or digitally signed messages supported by **digital certificates** that are signed by a third party.

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Presently, there is no mechanism in the...

Claim

... one of a username, a secret personal identification number, a password, a digitally signed message, **digital certificates**, a cryptogram, an electronic address of the cardholder, a serial number of the cardholder computer...

...a username; a password, a pass phrase; a personal identification number; a digitally signed message; **digital certificates**; a

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cryptogram; smart card-originated authentication information; an electronic address of the cardholder's...

18/3,K/16 (Item 13 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00884035 **Image available**

DISTRIBUTED INFORMATION SYSTEM AND PROTOCOL FOR AFFIXING ELECTRONIC
SIGNATURES AND AUTHENTICATING DOCUMENTS
SYSTEME ET PROTOCOLE D'INFORMATIONS DISTRIBUEES DESTINES A APPOSER DES

Sylvia Keys

15-Jun-05 03:55 PM

SIGNATURES ELECTRONIQUES ET A AUTHENTIFIER DES DOCUMENTS

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Patent and Priority Information (Country, Number, Date):

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Application: WO 2001US25922 20010817 (PCT/WO US0125922)

Priority Application: US 2000642072 20000818

Designated States:

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prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL
TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

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Publication Language: English

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International Patent Class: G06F-011/00

Fulltext Availability:

Detailed Description

Detailed Description

... and any electronic signature(s) applied thereto, including determining
that such records and any associated **digital signatures** have not been
altered, and more specifically, for providing a distributed method and
system for...the use of many prior-art one-way hash functions, often
dealing with PKI and **digital signature** applications.
One exemplary commercial endeavor that uses one-way hash functions
includes Tripwire, commercialized by...

...adoption.

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Other prior art approaches rely upon encryption and cryptography to
provide so-called **digital signatures** in an attempt to authenticate
identity of a document originator and provide some assurance as...

...intentionally or otherwise), any information encrypted with that key may
also be compromised. Further, the **secret keys** must somehow be
communicated to all intended recipients, but not to others, in a secure
fashion. Managing distribution of these **secret keys** to a large number
of recipients, and ensuring that the keys remain secret over any...

...public keys to other parties and require all parties to maintain
absolute confidentiality of their **private keys**.

Thus, symmetric and asymmetric cryptography each rely upon maintaining
the absolute confidentiality of the secret...

...party, it would be nearly impossible to distinguish between authorized

and unauthorized users of the **Private keys** are typically stored and thus may be vulnerable to compromise from other parties. The level...

...to circumvent protection afforded by passwords, and thus improperly gain direct access to the underlying **private keys**. As computer processing power continues to increase exponentially, it is becoming increasingly possible to utilize...

...15 complicated devices (e.g., biometrics, tokens, etc.), the overall security afforded to these **private keys** can be no greater than the security afforded by the passwords protecting these keys.

Thus...authentication. However, formidable challenges remain that impede widespread use of PKI, including access controls on **private keys**, poor interoperability, limited operational experience, high implementation costs, lack of well-defined and enforced security...

...a given entity, and will distribute such assertion in the form of a so-called **digital certificate** that can be used to encrypt documents and affix **digital signatures** to such documents. Thus if a user has sufficient trust in these assertions, there would...UID and, then or later, one or more coupons 300, in the fashion of an **ATM** for example.

A coupon will have been obtained for registration use with a given cluster...might be employed, including the use of HTTP authentication, i.e. RFC-2617, client-side **digital certificates**, etc.

With or without being required to authenticate the identity of a user-registrant, upon...15B.

In applicant's first invention, system 210 created digital fingerprint (DFP 120) and **digital certificate** (400) information from the digital file (DF 10), and promulgated this information to multiple... confidential information may include a password, actual or perhaps biometric, media information such as an **ATM** card, an identification card, etc.

DFP 120 is preferably generated by client system 252 and...of record (SOR) 246-A, 246-13, and promulgate a copy of the testimonial and **digital signature** information 690 for archiving.

18/3,K/17 (Item 14 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00880908 **Image available**

TOKENLESS BIOMETRIC AUTHORIZATION OF ELECTRONIC COMMUNICATIONS
AUTORISATION BIOMETRIQUE SANS JETON DE COMMUNICATIONS ELECTRONIQUES

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Patent and Priority Information (Country, Number, Date):

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Priority Application: US 2000639948 20000817

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AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK
SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

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Main International Patent Class: **G06F-017/60**

Fulltext Availability:

Detailed Description

Claims

Detailed Description

... enterprise representative, a non-financial data repository account, a
telephone number, a mailing address, a **digital certificate**, a network
credential, an Internet protocol address, a **digital signature**, an
encryption key, and an instant messaging address.

The method optionally includes a third-party...

...services; electronic data utilization patterns; employee status; job
title; data on user behavior patterns; a **digital certificate**; a
network i o credential; an Internet protocol address; a **digital
signature**; an encryption key; an instant messaging address;
user-customized medical records; an electronic audio signature...

...physical device. User-customized processing of electronic data comprises
invoking any of the following: a **digital certificate**, an identity
scrambler, a database authorization field, an electronic consumer loyalty
or consumer rewards incentive...wide area network, a cable network, a
wireless network, a telephone network, the Internet, an **ATM** network, or
an X

The device optionally includes enterprise registration identity data

comprising any of **digital certificate**, a network credential, an Internet protocol address, a **digital signature**, an encryption key, and an instant messaging address.

The device optionally includes a third-party...

- ...services; electronic data utilization patterns; employee status; job title; data on user behavior patterns; a **digital certificate**; a network credential; an Internet protocol address; a **digital signature**; an encryption key; an instant messaging address; user-customized medical records; an electronic audio signature...
- ...includes user-customized processing of electronic data further comprises invoking any of the following: a **digital certificate**, an identity scrambler, a database authorization field, an electronic consumer loyalty or consumer rewards incentive...
- ...network, a wireless digital network, a telephone network, a wide area network, the Internet, an **ATM** network, and an X.25 connection.

The device also includes a master electronic identifier further...a thin-client, or other public terminal or kiosk such as an Automated Teller Machine (**ATM**). In a preferred embodiment, the user is identified through biometrics while enterprise, or third-party...

- ...which are accessed to complete the electronic communication, are identified through the verification of a **digital certificate** issued by an authorized certifying authority. It is also
In one embodiment, execution of a...
- ...for access to stored database content, an electronic request to digitally sign data using a **digital certificate**, or an electronic request to present or display data in a customized format. In sum...is preferably located securely inside the BIA.

Communication security is provided by encryption using unique **secret keys** known only to that specific BIA 16 and the DPC 10, and the DES encryption...a user's registration with the DPC. Optionally, the BIA 16 also validates public key **digital certificates**.

In one embodiment, public keys of a particular certifying authority are initially stored in the...

- ...network, a wireless digital network, a telephone network, a wide area network, the Internet, an **ATM** network, and an X.25 connection. In particular, the Internet is made up of large...third-party is an entity or enterprise, such as a corporation, it can register a **digital certificate** with the Master Identifier 12. Third-party **digital certificates** are available from certifying authorities, and they provide the assurance that the entity with the...
- ...the BIA 16 device records.
Preferably, the security surrounding the registration of an entity's **digital certificates** or of the BIA hardware identification codes with the Master Identifier 12 is extremely strong...12 using 20 any of the following electronic verification: a third-party ID Code, a **digital certificate**, an Internet protocol ("IP") address, a biometric, a hardware identification number, or any other code...

network, and an X.25 connection.

58 The device of claim 32 wherein the master...

18/3,K/18 (Item 15 from file: 349)
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00879194 **Image available**

PERSON-CENTRIC ACCOUNT-BASED DIGITAL SIGNATURE SYSTEM
SYSTEME DE SIGNATURE NUMERIQUE FONDE SUR UN COMPTE CENTRE SUR UNE PERSONNE
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Application: WO 2001US41587 20010806 (PCT/WO US0141587)

Priority Application: US 2000223076 20000804

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AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL
TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

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PERSON-CENTRIC ACCOUNT-BASED DIGITAL SIGNATURE SYSTEM

International Patent Class: G06F-017/30 ...

... G06F-017/60

Fulltext Availability:

Detailed Description

Claims

Detailed Description

PERSON-CENTRIC ACCOUNT-BASED DIGITAL SIGNATURE SYSTEM

1. Cross Reference to Related Applications

This patent application claims priority in the United...

...U.S. Patent & Trademark Office and bearing serial number serial number 09/-,

(entitled "Account-Based Digital Signature (ABDS) System"); serial number

PCT/US

Sylvia Keys

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(entitled "Entity Authentication in Electronic Communications by Providing Verification Status of Device") and serial number 09/-, (entitled "Modifying Message Data and Generating Random Number **Digital Signature** Within Computer Chip") collectively referred to hereinafter as the "VS Applications"; serial number PCT/US...

...Device to Information During Manufacture") and serial number 09/ (entitled "Manufacturing Unique Devices That Generate **Digital Signatures** "); and serial number PCT/US

/

(entitled "Trusted Authentication **Digital Signature** (TADS) System").

II. Field of the Present Invention

The present invention relates to an improved...

...a legal action, such as the delivery of an executed contract.

Over recent years, **digital signatures** also have become an important part of e-commerce.

The origination of a **digital signature** generally comprises: (1) the calculation of a message digest-such as a hash value; and...

...a public/private key pair used in asymmetric cryptography. The resulting ciphertext itself usually constitutes the **digital signature**, which typically is appended to the message to form the EC. The second part of originating the **digital signature**-encrypting with a private key-is referred to herein as "generating" the **digital signature**, and the combined two steps (i.e., calculating a message digest and encrypting with a private key) is referred to herein as "originating" the **digital signature**. Furthermore, while the generation of the **digital signature** is conventionally understood as the encryption of the message digest, it is contemplated herein that generating the **digital signature** also may include simply encrypting the message rather than the message digest. **Digital signatures** are important because any change whatsoever to the message in an EC is detectable from an analysis of the message and the **digital signature**. In this regard, the **digital signature** is used to "authenticate" a message contained within the EC (hereinafter referred to as "Message...").

...with the resulting hash value then being transmitted to the device for generation of the **digital signature**. In order to perform the Message Authentication in this example, the recipient of the EC...

...algorithm to the message to calculate a hash value, and the recipient decrypts the **digital signature** using the public key. If the hash value calculated by the recipient equals the hash value of the decrypted **digital signature**, then the recipient determines that the content of the message contained in the EC was...

...the owner of the private key.

This, trusted information conventionally is provided based on a **digital certificate** issued by a trusted third party that accompanies the **digital signature** and binds the identity (or other attributes) of the private key owner with the public key. A **digital certificate** (also

known as a "digital ID") is a voucher by a third party (commonly referred ...

...attesting to the identity (or other attributes) of an owner of a public key. Essentially, **digital certificates** are the electronic counterparts to driver licenses, passports, membership cards, and other paper-based forms of identification. The **digital certificate** itself comprises an electronic message including a public key and the identity of the owner of the public key. A **digital certificate** also typically contains an expiration date for the public key, the name of the Certification Authority, a serial number of the **digital certificate**, and a **digital signature** of the Certification Authority. One of the reasons for an expiration date is to limit...

...attributes other than the identity may change over time. The most widely accepted format for **digital certificates** is defined by the CCITT X.509 international standard; thus, certificates can be read or written by any application complying with X Based on a **digital certificate** included in an EC, a recipient is able to authenticate the **digital certificate** using a public key of the Certification Authority and thereby, presumably, confirm the identity of the owner set forth therein.

The system wherein a **digital certificate** is included in an EC comprises a "public key infrastructure" (PKI) commonly referred to as the "Certification Authority **Digital Signature**" (CADS) system. A particular implementation 100 of the CADS system in the context of an...

...the name on the card. Software on the purchaser's computer 104 then originates a **digital signature** for the message using a private key of the purchaser 102 safeguarded in the computer 104. The i5 software also maintains a **digital certificate** on the computer 104 issued by a Certification Authority 106a. The message, **digital signature**, and **digital certificate** then are combined into an EC, and the EC is communicated over the Internet 108...

...0.

Upon receipt, the merchant 110 authenticates the message using the public key in the **digital certificate**. If successful, the merchant 110 then authenticates the **digital certificate** using a public key of the Certification Authority 106a. Successful authentication of the **digital certificate** may satisfy the merchant 110 that the purchaser-the sender of the EC-is the owner identified in the **digital certificate**. If the merchant 110 is so satisfied, then the merchant 110 submits the account information...

...knowing the other's identity, the CADS system does have its drawbacks. For example, a **digital certificate** typically is issued with an expiration date, and an expired **digital certificate** generally is not recognized in the industry. Furthermore, if a private key is lost or...

...owner of the private key must notify the Certification Authority to revoke the owner's **digital certificate**; however, a recipient of an EC with a **digital certificate** will only know of the revocation of the **digital certificate** if the recipient cross-references the serial number of the **digital certificate** against a certificate revocation list (CRL) published by the Certification Authority. Another drawback to the CADS system is that the **digital certificate** itself is only as good as the particular authority that issues it, and it often is necessary to obtain multiple **digital certificates** (i.e., from

Certificate Authorities 106a, 106b to 106n) in order to create a sufficient...

- ...system rests upon the secrecy of the private key of the Certification Authority issuing a **digital certificate**, which, if compromised, collapses the CADS system.

In the context of an EC regarding an...

- ...fraudulent charges to the account of the purchaser, especially as not all merchants require a **digital signature** and **digital certificate** to fill a purchase order. Moreover, financial institutions have yet to standardize a requirement that a **digital certificate** of a purchaser be submitted as a condition precedent to approving a payment request by ...
- ...by the merchant, and whether the account information has been reported lost or stolen.

Further, **digital certificates** raise significant privacy issues in many circumstances.

Accordingly, a need exists for an improved system of communication using **digital signatures**, especially wherein an EC pertains to an account upon which the person (or device) digitally...

- ...a public key of a public-private key pair with the unique identifier, generating a **digital signature** for an electronic message using a private key of the public-private key pair, the such as a public key of a user device that generates **digital signatures**, and third-party account identifiers each of which identifies to a third-party an account ...
- ...method of managing a database for identification of security features of a device that generates **digital signatures**, and includes the steps of recording in the database for each of a plurality of...
- ...security features from the database to a recipient of an electronic message for which a **digital signature** was originated utilizing a private key of the public-private key pair of a particular...
- ...references refer to like elements, and wherein.

Fig.1 illustrates a prior art Certification Authority **Digital Certificate** (CADS) system; Fig. 2 illustrates a preferred Account-based **Digital Signature** (ABDS) system in accordance with a first aspect of the present invention; Fig. 2a illustrates...present invention broadly comprises the association of a public key of a device that originates **digital signatures** using asymmetric cryptography to other information in an account database record. In general, a method...

- ...includes applying dynamic risk analysis to a specific message to gauge the risk that the **digital signature** for the message was fraudulently originated and, thus, to determine whether or not to perform...
- ...account holder" is generally any person possessing a device that is capable of generating a **digital signature** using a private key retained therein; the private key corresponding with a public key associated...
- ...some embodiments, the "account holder" is, itself, a device that is

capable of generating a **digital signature** using a private key retained therein; the private key corresponding with a public key associated...

...invention, general and specific implementations of two-party, three-party, and multiple-party Account-based **Digital Signature** (ABDS) systems now will be described in greater detail.

1 . Account-based **Digital Signature** (ABDS) Systems

a. General 2-Party

y ABDS Systems

Fig. 2 illustrates a preferred Account-based **Digital Signature** (ABDS) system 200 in accordance with a first aspect of the present invention. Specifically, Fig...

...instruction (i1) for the account authority 212 to perform in relation to the account. The **digital signature** of the message also preferably includes a unique ...session key, such as, for example, a date and time stamp, so that no two **digital signatures** originated by the device 250 would ever be identical (and also so that any duplicate **digital signature** received by the account authority 212 could be identified as such and disregarded).

Using the...

...not perform any action on the account of the account holder 202 without a valid **digital signature** originated by the device 250 (or, alternatively, without the actual, physical presence of the account... from the two-party ABDS system 200 (from Fig. 2) in that the message and **digital signature** from the account holder 302 to the account authority 312 is communicated first to the...

...means of an EC 305. The intermediate party 310 then forwards the same message and **digital signature** in another EC 315 to the account authority 312.

An instruction (i2) is communicated from...

...the account authority 312 to approve or reject the message. As shown, the message and **digital signature** in EC 315 are the same as the message and **digital signature** in EC 305.

Upon receipt of the EC 315, the account authority 312 attempts to... Documents").

Preferably, the device is capable of receiving an electronic message and then originating a **digital signature** for the electronic message utilizing the private key stored therein. The device preferably also performs...

...of the devices require use of an I/O support element to transmit information, including **digital signatures** and messages to recipients of the ECs. Some of the devices are self-contained, which means that they can generate and transmit messages, **digital signatures**, and other information without the use of external apparatuses; some devices, although self-contained, are of the device (other than for the purpose of generating a **digital signature** internally within the device). Furthermore, the device preferably includes the following additional characteristics: it is...

...i.e., physical tampering or intrusion of the device should destroy the

fictionality of the **digital signature** component of the device and/or erase the private key); the device maintains the private...

...the device allows export of the public key when necessary.

Furthermore, the device preferably originates **digital signatures** in accordance with an elliptical curve **digital signature** algorithm (ECDSA) as specified in Federal Information Processing Standards Publication 186-2, **Digital Signature Standard**, US DOC/NBS, January 11, 1994 (hereinafter "TIPS PUB 186-2"), which is incorporated herein by reference. Accordingly, the device originates **digital signatures** using a random number generator, and the hash function is performed using the secure...

...the device must be input into the device before it will operate to generate **digital signatures**. Alternatively, but also conventionally, the Secret is shared with the recipient 20 beforehand and, when...

...an account holder to an account authority preferably includes both a message (M) and a **digital signature** of the message (DS(M)). The message preferably includes the unique account identifier (acctID) and... message and, corresponding, intended for the account authority to act in reliance thereupon. Since a **digital signature** is capable of being generated by a device, potentially without the desire or even 30...

...or user of the device, intent cannot be presumed from the mere receipt of a **digital signature** from a device of the account holder. For this reason, some means of confirming the...75, the account holder 7502 transmits an EC, which contains a message (.N41) and a **digital signature** for the message (DS(M1)). In this interchange, the account holder 7502 provides sufficient proof...

...75, the account holder 7502 transmits an EC, which contains a message (M2) and a **digital signature** for the message (DS(M2)). In this interchange, the account authority 7512 is not satisfied...

...that the account holder 7502 send a new EC with the same message (M2) and **digital signature** therefor (DS(M2)) but with the additional performance of Factor B or C Entity Authentication...

...75, the account holder 7502 transmits an EC, which contains a message (.N43) and a **digital signature** therefor (DS(M3)). In this interchange, the account authority 7512 is not satisfied that it...

...the account holder 7502; EC 3B contains a proposed new message (M4) for review and **digital signing** by the account holder 7502. Message (M4) is composed by the account authority 7512 and...includes various data fields, elements, or portions, generally speaking, a message (M) 7603 and a **digital signature** (DS) 7605. These components generally form a data structure that may be stored, communicated, or...

...this aspect of the invention, the body portion 7609 comprises a message 7603 and the **digital signature** 7605 therefor (separated by a hashed line in the illustration). The message 7603 preferably includes...

...key (PuK) associated with the account, time/date stamp, encrypted message, and the like. The **digital signature** 7605 comprises information from the message 7603 (for example, a hash of the message, the...

...7609 comprises the account identifier 7616 and a message content portion 7618, which incorporates the **digital signature** 7605 (ignoring the

hashed line). The account identifier 7616 may be considered a separate component from the message content 7618. Similar to the first arrangement, the **digital signature** 7605 portion of the message content 7618 comprises other information from the message content 7618...

...either of the above arrangements, the EC 7601 includes the account identifier 7616 and the **digital signature** 7605 as significant components thereof.

It will be appreciated that the **digital signature** 7605 of any arrangement of data elements may constitute information such as the account identifier...in the form of a card 650, such as an IC card, credit card, or **ATM** card, which is capable of being used at an **ATM** machine 660 or the like. The card 650 securely protects therein a private key of a public-private key pair. The **ATM** machine 660 includes a display 662, a card reader 664, an alphanumeric keypad 666, and...

...a bank, savings and loan, credit card company, or the like. In this example, the **ATM** machine 660 communicates electronically with the financial institution 612 over a secure, internal banking network...

...occurs when the account holder 602 initially attempts to login to or otherwise access the **ATM** machine 660.

Regardless of which type of EC is communicated from the account holder 602...

...the account holder 602 inserts the card 650 into the card reader 664 of the **ATM** machine 660. The insertion of the card 650 initializes the **ATM** machine 660, which, using display 662, prompts (Step 804) the account holder 602 to perform...

...an electronic message is composed (Step 806) for sending to the financial institution 612.

The **ATM** machine 660 displays a menu of available accounts upon which the account holder 602 may...

...The available accounts are stored within memory on the card 650 and retrieved by the **ATM** machine 660 for display to the account holder 602. Of course, if only one account...

...without requiring specific selection by the account holder 602.

Upon selection of an account, the **ATM** machine 660 displays a menu of operations that can be performed on the selected account...

...the account holder 602, such as a withdrawal or transfer amount and the like, the **ATM** machine 660 composes an electronic message that includes an instruction to the financial institution ...account holder 602.

The message then is transmitted (Step 808) to the card 650 for **digital signing** by the account holder 602. In this regard, upon receipt of data representing the message, the card 650 originates (Step 810) a **digital signature** for the message by first calculating a hash value for the data and then encrypting...

...private key retained within the card 650. The card 650 then outputs (Step 812) the **digital signature** to the **ATM** machine 660, which then transmits (Step 814) the message and the **digital signature** therefor

in an EC to the financial institution 612.

With reference to Fig. 9, the EC is received (Step 902) by the financial institution 612 from the **ATM** machine 660. The financial institution 612 then retrieves (Step 904) from the account database 614...

...provide an account balance, then the financial institution 612 transmits the account balance to the **ATM** machine 660 for presentation to the account holder 602. If the account holder 602 instructs...

...that the funds are available and, if so, sends an 1 5 authorization to the **ATM** machine 660 to dispense the requested amount offunds (up to the limit allowed and/or...

...that the account holder 602 provide additional entity authentication information or status prior to the **digital signature** being generated by the card 650. The **ATM** machine 660 may be used to advantage to sequence the events properly so that the...

...holder 602 first sees the proposed confirmation message displayed on the display 662 of the **ATM** machine 660, then is prompted to input a Secret or bionietric value, after which the **ATM** machine 660 provides the confirmation message to the card 650 for **digital signature**. The remaining method of generating and processing such transaction confirmation EC is similar to that...account selected by the account holder 1002.

The PDA 1050 then originates (Step 1208) a **digital signature** for the message by first calculating a hash value for the data and then encrypting...

...retained within the PDA 1050. The PDA 1050 then outputs (Step 1210) the message and **digital signature** therefor to the wireless modem of the PDA 1050, which then transmits (Step 1212) the message and the **digital signature** in an EC to the brokerage firm 1012.

With reference to Fig. 13, the EC...message is complete, but also causes the cell phone 1450 to originate (Step 1608) a **digital signature** for this first message. Next, the cell phone 1450 transmits (Step) the message and **digital signature** in an EC to the bill payment service 1412 over the wireless communications network 1408...

...complete bill payment transaction can be forinulated by the bill payment service 1412. Preferably, no **digital signatures** need to be generated or sent during the menu selection/message generation process. Upon completion...payment transaction is accepted (Step 1614) and the cell phone 1450 originates (Step 1616) a **digital signature** for the proposed payment transaction. The message that is digitally signed can either be the...

...the bill payment service 1412 can transmit a message to the cell phone 1450 for **digital signature** in response to the number (#) key being depressed in response to the last menu selection. In either case, the cell phone 1450 then transmits (Step 1618) the message and **digital signature** in an EC to the bill payment service 1412 over the wireless communications network 1408...

...in RAM on the cell phone 1450 as a digital file and for which a **digital signature** is then originated by the cell phone 1450.

Referring again to Fig. 17, the steps...41587

possessing a private key of the account holder used to generate a **digital signature** of an electronic message. 113. The method of claim 86, wherein the information includes security...

...account information of users including:

- (a) a public key of a user device that generates **digital signatures**,
- (b) third-party account identifiers each of which identifies to a third-party an account...

...of the CKA account identifiers and a message including the new public key and a **digital signature** therefor,

- (b) authenticating the message of the EC using the public key associated with the...retrievable by a unique identifier, the information including security features of a device that generates **digital signatures** using a private key of a public-private key pair;
- (b) associating the public key...

...identifier in the database; (c) receiving an electronic communication including the unique identifier and a **digital signature** for a message generated by a suspect device;

- (d) authenticating the message using the public...

...the security features of the genuine device; and

- (f) gauging the risk that said generated **digital signature** was fraudulently sent based on said identified security features, of the genuine device. 131. The...

...the Internet. 139. The method of claim 130, further comprising gauging the risk that the **digital signature** was fraudulently originated based on said identified security features. 140. A method of managing a database for identification of security features of a device that generates **digital signatures**, comprising the steps of.

- (a) recording in the database for each of a plurality of devices,
 - (i) a public key of a pair of public-**private keys** of the device, and
 - (ii) information including security features of the device, the security features...

...security features from the database to a recipient of an electronic message for which a **digital signature** was originated utilizing a private key of the public-private key pair of a particular...

...particular device. . The method of claim 140, further comprising gauging the risk that said originated **digital signature** was fraudulently originated based on said identified security characteristics. 142. The method of claim 140, wherein the public key used to authenticate the electronic message is received with the **digital signature**. 143. The method of claim 140, wherein the public key associated with the record identified...

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00862471

PHYSICAL PRESENCE DIGITAL AUTHENTICATION SYSTEM (DEVICE FABRICATION)
 SYSTEME D'AUTHENTIFICATION NUMERIQUE D'UNE PRESENCE PHYSIQUE (FABRICATION

DU DISPOSITIF)

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200195066 A2 20011213 (WO 0195066)

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Priority Application: US 2000180530 20000207; US 2000570399 20000512

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AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE
ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT
LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM
TR TT TZ UA UG US UZ VN YU ZA ZW

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Main International Patent Class: **G06F**

Fulltext Availability:

Detailed Description

Detailed Description

... and includes some on-chip or off-chip memory for storing and/or
generating a **cryptographic signature**. A Microchip 12C508, 12C672 or
higher processing unit is preferred. In one embodiment, a Microchip...
merely a randomly generated number. In another embodiment, the
transaction confirmation number is actually a **digital signature** of
the order number and.

a public key. A **digital signature** is used to authenticate the
identity of the sender (Le., the third party authentication server) or
the signer of the document. The use of the **digital signature** ensures
that: the signed document cannot be easily repudiated, cannot be imitated
by someone else...parties may want to verify each other for a given
transaction.

authority and...

...in this step of the process. In other words, the PC checks the merchant's **digital certificate** and the response to the customer's challenge with the merchant's public key. The merchant...PC. The electronic card receives the challenge via the PC. The electronic card calculates the **digital signature** to sign the challenge and sends the response back via the conventional land-line telephone...

...a button in a set-up menu.

Essentially, PKI allows users to send documents with **digital certificates** to prove that the user is indeed the user. The client authentication involves the use...

...infrastructure.

In general, the CSI` essentially enables the servers to ask the users to send **digital certificates**. The CSI` in the client sends an unsigned **digital certificate**. The server which supports CSI` receives the **digital certificate** and sends a random number back to the client to have (inverted exclamation mark)t...

...challenge) to the PC across the web.

The PC, through the CSI` module, sends a **digital certificate** (which includes the customer's public key) and the electronic card data to a third party CSI` server. This third party CSI` server functions as a **digital certificate** signing facility and holder of **private keys** of all its members. This CSI` server signs the digital certificate with the random number...

...the On-Line Authentication section of the patent specification. The PC then delivers the signed **digital certificate** and random number to the web merchant who checks the signature with the customer's...as a loyalty card (for earning and redeeming incentive points), a gift certificate, or an **ATM** card. Each registered user is associated with his own account for each of these uses...

18/3,K/20 (Item 17 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00837966 **Image available**

SYSTEMS AND METHODS FOR PROVIDING REMOTE SUPPORT VIA PRODUCTIVITY CENTERS
SYSTEMES ET PROCEDURES PERMETTANT D'APPORTER UNE TELEASSISTANCE PAR
L'INTERMEDIAIRE DE CENTRES DE PRODUCTIVITE

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Sylvia Keys

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Priority Application: US 2000190412 20000317; US 2000190390 20000317
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EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS
LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ
TM TR TT TZ UA UG UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
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Publication Language: English
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Fulltext Word Count: 12153

Main International Patent Class: G06F-017/60
Fulltext Availability:
Detailed Description

Detailed Description

... wide variety of tasks, from interconnections to other systems or networks, such as internet connections, **ATM** connections, frame relay connections, and telephonic connections, on operating systems at both the server and...practices to provide the highest level of security. For example, the productivity center IO employs **digital signatures** /certificates using public- **private keys** and uses Internet Information Server (IIS) Version 5, IPsec-based security for the VPN 12...
...approved list of users. The productivity center IO may also authenticate the user using a **digital certificate** if SSL is enabled for that client. The primary interface to all client data is...

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00831792 **Image available**
SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR AN AUTHENTICATION MANAGEMENT INFRASTRUCTURE
SYSTEME, PROCEDE ET PRODUIT LOGICIEL POUR INFRASTRUCTURE DE GESTION D'AUTHENTIFICATION

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Patent and Priority Information (Country, Number, Date):

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AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
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LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ
TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

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Main International Patent Class: G06F-012/00

International Patent Class: G06F-012/14 ...

Fulltext Availability:

Detailed Description

Claims

Detailed Description

... of the present invention is directed to a method of storing 5 both templates and **digital certificates** in a hierarchical structure for ease of access to the templates and the **digital certificates**. Another feature of the present invention is directed to utilizing the system of the present...to FIG. 3, is more than the typical desktop computer. For example, both cars and **ATM** machines incorporate computers, home and office physical security systems incorporate computers, etc.

Thus, the present...

...are just some of the various applications where the present invention can be applied.

- 110

Digital Certificates

The inventors of the present invention recognized a limitation that is encountered when **digital certificates** are used in a networked environment without system 102 (FIG. 1). Generally, a **digital certificate** defines user privileges. More specifically, a **digital certificate** attaches to an electronic message and is used for security purposes. The most common use of a **digital certificate** is to verify that a user sending a message is who he or she claims...

...a digital

I 0 certificate from a Certificate Authority (CA). The CA issues an encrypted **digital certificate** containing the applicant's public keys, **private keys** and a variety of other identification information. The applicant's public key is signed by...

...The recipient of an encrypted message uses the CA's public key to decode the **digital certificate** attached to the message, verifies it as issued by the CA and then obtains the...

...use a token or smart card, or any combination thereof, to gain access to a **digital certificate**. Because each user's **digital certificate** is stored on one computer within the network, the **digital certificate** is

bound to a single computer. This ...the present invention recognized that a scheme is needed for easy access to all user **digital certificates** such that a user can gain access to required resources from any location within the enterprise.

The scheme for easy access to all user **digital certificates**, such that a user can gain access to his or her **digital certificate** from any location within the enterprise, is the same scheme as described above in reference to FIG. 28 and the storing of templates 502. In enterprise 2800, all **digital certificates** are stored at corporate office 2802. Then the additional storage of **digital certificates** at individual offices depends on the logical block (e.g. either block 2818 or block...

...is in.

The procedure is as follows. First, each office in enterprise 2800 stores the **digital certificates** for every user that was issued a **digital certificate** at that office. Then, in each logical block, start with the offices at the bottom...

...start with office 2806 and office 2808. Office 2806 and office 2808 only store the **digital certificates** for users that were issued **digital certificates** at those offices. Then, following the hierarchical structure up to office 2804, office 2804 stores the **digital certificates** for users that were issued **digital certificates** at office 2804, and also copies of all the **digital certificates** stored at office 2806 and office 2808. This procedure is repeated until the top of...

...hierarchical structure, the farthest any office will have to go to get a user's **digital certificate** is corporate office 2802. For example, say User A was issued a certificate at office 2812. This means that User A's **digital certificate** is stored at office 2812, office 2810 and corporate office 2802.

If User...

...hierarchical structure up to corporate office 2802 to retrieve a copy of User A's **digital certificate**. Once it is determined that the user is finished with his or her **digital certificate**, the **digital certificate** must be re-retrieved the next time the user requests access to his or her **digital certificate**. Not only does the hierarchical structure of enterprise 2800 provide ease of access, but also a means of backing up **digital certificates** within enterprise 2800. The use of a hierarchical directory to locate templates 502 within enterprise...

...digital - 112 certificates. The X-500 directory will include pointers to the offices- that user **digital certificates** are stored.

2. Roaming Profile Server

The concept of using a public key to decode a **digital certificate** attached to a message was introduced above. Some cryptographic systems use two keys, a public...

...I 0 An important element to the public key system is that the public and **private keys** are related in such a way that only the public key can be used to...

58 The system of claim 46, wherein said computer is attached to a...

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00825100 **Image available**

PHYSICAL PRESENCE DIGITAL AUTHENTICATION SYSTEM (BROADCAST MEDIA)

1SYSTÈME D'AUTHENTIFICATION NUMÉRIQUE DE PRESENCE PHYSIQUE (SUPPORTS DE
RADIODIFFUSION)

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Patent and Priority Information (Country, Number, Date):

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ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT
LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM
TR TT TZ UA UG US UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
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Fulltext Availability:

Detailed Description

Detailed Description

... and includes some on-chip or off-chip memory for storing and/or
generating a **cryptographic signature**. A Microchip 12C508, 12C672 or
higher processing unit is preferred. In one embodiment, a Microchip...

merely a randomly generated number. In another embodiment, the transaction confirmation number is actually a **digital signature** of the order number and a public key. A **digital signature** is used to authenticate the identity of the sender (i.e., the third party authentication server) or the signer of the document. The use of the **digital signature** ensures that the signed document cannot be easily repudiated, cannot be imitated by someone else...both parties may want to verify each other for a given transaction.

In either case, **digital certificates** can be used. As known to those skilled in the art, a **digital certificate** is similar to an electronic "credit card" that establishes the certificate user's credentials when...

...or other transactions on the web. It is normally issued by a certification authority. The **digital certificate** contains the user's name, serial number, expiration dates, a copy of the certificate holder's public key, and the **digital signature** of the certificate-issuing authority so that the recipient of the **digital certificate** can verify that the certificate is indeed authentic and real. Some **digital certificates** conform to the X.509 standard.

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FIG. 33 shows the sequence of steps of...

...the case where the customer wants to verify the merchant. Initially, the merchant sends a **digital certificate** over the web to the customer. The **digital certificate** contains the date of expiration, name of merchant, signature of the certification authority (e.g., Verisign), and the merchant's public key. The customer's PC receives the **digital certificate** and in turn, transmits the **digital certificate** to the customer's electronic card. The electronic card contains standard logic and programming to perform a check to make sure the **digital certificate** is valid. In one embodiment, the electronic card checks to make sure that the **digital certificate** is signed by the certification authority and contains no errors. By verifying that the **digital certificate** is properly signed by the certification authority, the customer is making sure that no one...

...merchant. Alternatively, instead of the customer sending a random number, the customer can send a **digital certificate**, which contains the ID and a public key.

This certificate is sent by way of...

...private key. The certification authority ensures that this public key belongs to the merchant when the **digital certificate** has been delivered to the customer. To indicate a successful verification, the electronic card contains...number (i.e., individual ID or serial number), the customer's public key, and a **digital certificate**. The PC receives this transmission and sends the card ID, the customer's public key, and the **digital certificate** to the merchant.

When the merchant receives the card ID, the customer's public key, and the **digital certificate**, it checks to make sure that it is a good signature from the certification authority...

...each other substantially concurrently. The electronic card sends a first set of data including the **digital certificate**, the card ID, the customer's public key, and a challenge (e.g., random number...

...data which includes its own challenge, the response to the customer's

challenge, and the **digital certificate** which contains the merchant's public key (among other data as described above). The customer...

...set of data and retransmits it to the electronic card.

The electronic card checks the **digital certificate** to make sure it was signed by the proper certification authority and the response to...

...with the public key that was just sent by the merchant as part of the **digital certificate**. If the response is proper, then the customer can trust the merchant. The electronic card...

...in this step of the process. In other words, the PC checks the merchant's **digital certificate** and the response to the customer's challenge with the merchant's public key.

The...

...PC. The electronic card receives the challenge via the PC. The electronic card calculates the **digital signature** to sign the challenge and sends the response back via the conventional land-line telephone...

...a button in a set-up menu.

Essentially, PKI allows users to send documents with **digital certificates** to prove that the user is indeed the user. The client authentication involves the use...

...each Crypto Service Provider (CSP) is a dynamic-link-library (DLL) with an associated **cryptographic signature** authorizing it for use by the Crypto API. One of the jobs of the CSP...infrastructure.

In general, the CSP essentially enables the servers to ask the users to send **digital certificates**. The CSP in the client sends an unsigned **digital certificate**. The server which supports CSP receives the **digital certificate** and sends a random number back to the client to have it digitally signed. The...

...challenge) to the PC across the web.

The PC, through the CSP module, sends a **digital certificate** (which includes the customer's public key) and the electronic card data to a third party CSP server. This third party CSP server functions as a **digital certificate** signing facility and holder of **private keys** of all its members. This CSP server signs the **digital certificate**, signs the random number with the customer's private key, and then sends them back...

...the On-Line Authentication section of the patent specification. The PC then delivers the signed **digital certificate** and random number to the web merchant who checks the signature with the customer's public key.

In an alternative embodiment, the **digital certificate** with the customer's public key could be sent directly to the merchant first. Thereafter...as a loyalty card (for earning and redeeming incentive points), a gift certificate, or an **ATM** card. Each registered user is associated with his own account for each of these uses...

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00825099 **Image available**

**PHYSICAL PRESENCE DIGITAL AUTHENTICATION SYSTEM (SMART E-WALLET)
SYSTEME D'AUTHENTIFICATION NUMERIQUE DE PRESENCE PHYSIQUE (PORTEFEUILLE
ELECTRONIQUE INTELLIGENT)**

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Patent and Priority Information (Country, Number, Date):

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ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT
LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM
TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

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Fulltext Word Count: 62987

Main International Patent Class: G06F-017/60

Fulltext Availability:

Detailed Description

Detailed Description

... and includes some on-chip or off-chip memory for storing and/or
generating a **cryptographic signature**. A Microchip 12C508, 12C672 or
higher processing unit is preferred. In one embodiment, a Microchip...
merely a randomly generated number. In another embodiment, the
transaction confirmation number is actually a **digital signature** of
the order number and a public key. A **digital signature** is used to
authenticate the identity of the sender (i.e., the third party
authentication server) or the signer of the document. The use of the

digital signature ensures that the signed document cannot be easily repudiated, cannot be imitated by someone else...both parties may want to verify each other for a given transaction.

In either case, **digital certificates** can be used. As known to those skilled in the art, a **digital certificate** is similar to an electronic "credit card" that establishes the certificate user's credentials when...

...or other transactions on the web. It is normally issued by a certification authority. The **digital certificate** contains the user's name, serial number, expiration dates, a copy of the certificate holder's public key, and the **digital signature** of the certificate-issuing authority so that the recipient of the **digital certificate** can verify that the certificate is indeed authentic and real. Some **digital certificates** conform to the X.509 standard.

88

FIG. 33 shows the sequence of steps of...

...the case where the customer wants to verify the merchant. Initially, the merchant sends a **digital certificate** over the web to the customer. The **digital certificate** contains the date of expiration, name of merchant, signature of the certification authority (e.g., Verisign), and the merchant's public key. The customer's PC receives the **digital certificate** and in turn, transmits the **digital certificate** to the customer's electronic card. The electronic card contains standard logic and programming to perform a check to make sure the **digital certificate** is valid. In one embodiment, the electronic card checks to make sure that the **digital certificate** is signed by the certification authority and contains no errors. By verifying that the **digital certificate** is properly signed by the certification authority, the customer is making sure that no one of the customer sending a random number, the customer can send a **digital certificate**, which contains the ID and a public key.

This certificate is sent by way of...

...private key. The certification authority ensures that this public key belongs the merchant when the **digital certificate** has been delivered to the customer. To indicate a successful verification, the electronic card contains...

...number (i.e., individual ID or serial number), the customer's public key, and a **digital certificate**. The PC receives this transmission and sends the card ID, the customer's public key, and the **digital certificate** to the merchant.

When the merchant receives the card ID, the customer's public key, and the **digital certificate**, it checks to make sure that it is a good signature from the certification authority...

...each other substantially concurrently. The electronic card sends a first set of data including the **digital certificate**, the card ID, the customer's public key, and a challenge (e.g., random number...

...data which includes its own challenge, the response to the customer's challenge, and the **digital certificate** which contains the merchant's public key (among other data as described above). The customer...

...set of data and retransmits it to the electronic card.

The electronic card checks the **digital certificate** to make sure it was signed by the proper certification authority and the response to...

...with the public key that was just sent by the merchant as part of the **digital certificate**. If the response is proper, then the customer can trust the merchant. The electronic card...

...in this step of the process. In other words, the PC checks the merchant's **digital certificate** and the response to the customer's challenge with the merchant's public key.

The...

...PC. The electronic card receives the challenge via the PC. The electronic card calculates the **digital signature** to sign the challenge and sends the response back via the conventional land-line telephone to send documents with **digital certificates** to prove that the user is indeed the user. The client authentication involves the use ...

...Physically, each Crypto Service Provider (CSP) is a dynamic-link-library (DLL) with an associated **cryptographic signature** authorizing it for use by the Crypto API. One of the jobs of the CSP...

...infrastructure.

In general, the CSP essentially enables the servers to ask the users to send **digital certificates**. The CSP in the client sends an unsigned **digital certificate**. The server which supports CSP receives the **digital certificate** and sends a random number back to the client to have it digitally signed. The...

...challenge) to the PC across the web.

The PC, through the CSP module, sends a **digital certificate** (which includes the customer's public key) and the electronic card data to a third party CSP server. This third party CSP server functions as a **digital certificate** signing facility and holder of **private keys** of all its members. This CSP server signs the **digital certificate**, signs the random number with the customer's private key, and then sends them back...

...the On-Line Authentication section of the patent specification. The PC then delivers the signed **digital certificate** and random number to the web merchant who checks the signature with the customer's public key.

In an alternative embodiment, the **digital certificate** with the customer's public key could be sent directly to the merchant first. Thereafter...as a loyalty card (for earning and redeeming incentive points), a gift certificate, or an **ATM** card. Each registered user is associated with his own account for each of these uses...

18/3,K/24 (Item 21 from file: 349)
DIALOG(R) File 349:PCT FULLTEXT
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00825041

PHYSICAL PRESENCE DIGITAL AUTHENTICATION SYSTEM (POINTS/CASH PURCHASING MECHANISM)

SYSTEME D'AUTHENTIFICATION NUMERIQUE DE PRESENCE PHYSIQUE (MECANISME

Sylvia Keys

15-Jun-05 03:55 PM

D'ACHAT PAR POINTS/EN ESPECES)

Patent Applicant/Assignee:

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200157624 A2-A3 20010809 (WO 0157624)

Application: WO 2001US4063 20010207 (PCT/WO US0104063)

Priority Application: US 2000180530 20000207; US 2000570399 20000512

Designated States:

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prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE
ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT
LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM
TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

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(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 63016

International Patent Class: G06F-017/60 ...

... G06F-017/00

Fulltext Availability:

Detailed Description

Detailed Description

... and includes some on-chip or off-chip memory for storing and/or
generating a **cryptographic signature**. A Microchip 12C508, 12C672 or
higher processing unit is preferred. In one embodiment, a Microchip...
merely a randomly generated number. In another embodiment, the
transaction confirmation number is actually a **digital signature** of
the order number and a public key. A **digital signature** is used to
authenticate the identity of the sender (i.e., the third party
authentication server) or the signer of the document. The use of the
digital signature ensures that the signed document cannot be easily
repudiated, cannot be imitated by someone else...both parties may want to
verify each other for a given transaction.

In either case, **digital certificates** can be used. As known to those skilled in the art, a **digital certificate** is similar to an electronic "credit card" that establishes the certificate user's credentials when...

...or other transactions on the web. It is normally issued by a certification authority. The **digital certificate** contains the user's name, serial number, expiration dates, a copy of the certificate holder's public key, and the **digital signature** of the certificate-issuing authority so that the recipient of the **digital certificate** can 'Verify that the certificate is indeed authentic and real. Some **digital certificates** conform to the X.509 standard.

88

CD P 0 C@ 0 0 P@ CCnD...each other substantially concurrently. The electronic card sends a first set of data including the **digital certificate**, the card ID, the customer's public key, and a challenge (e.g., random number...

...data which includes its own challenge, the response to the customer's challenge, and the **digital certificate** which contains the merchant's public key (among other data as described above). The customer...
...set of data and retransmits it to the electronic card.

The electronic card checks the **digital certificate** to make sure it was signed by the proper certification authority and the response to...

...with the public key that was just sent by the merchant as part of the **digital certificate**. If the response is proper, then the customer can trust the merchant. The electronic card...

...in this step of the process. In other words, the PC checks the merchant's **digital certificate** and the response to the customer's challenge with the merchant's public key.

The...

...PC. The electronic card receives the challenge via the PC. The electronic card calculates the **digital signature** to sign the challenge and sends the response back via the conventional land-line telephone...

...a button in a set-up menu.

Essentially, PKI allows users to send documents with **digital certificates** to prove that the user is indeed the user. The client authentication involves the use...

...Physically, each Crypto Service Provider (CSP) is a dynamic-link-library (DLL) with an associated **cryptographic signature** authorizing it for use by the Crypto API. One of the jobs of the CSP the users to send **digital certificates**. The CSP. in the client sends an unsigned **digital certificate**. The server which supports CSP receives the **digital certificate** and sends a random number back to the client to have it digitally signed. The...

...challenge) to the PC across the web.

The PC, through the CSP module, sends a **digital certificate** (which includes the customer's public key) and the electronic card data to a third party CSP server. This third party CSP server functions as a **digital certificate** signing facility and holder of **private keys** of

all its members. This CSP server signs the **digital certificate**, signs the random number with the customer's private key, and then sends them back...
...the On-Line Authentication section of the patent specification. The PC then delivers the signed **digital certificate** and random number to the web merchant who checks the signature with the customer's public key.

In an alternative embodiment, the **digital certificate** with the customer's public key could be sent directly to the merchant first. Thereafter...as a loyalty card (for earning and redeeming incentive points), a gift certificate, or an **ATM** card. Each registered user is associated with his own account for each of these uses...

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00825040 **Image available**

PHYSICAL PRESENCE DIGITAL AUTHENTICATION SYSTEM (WEBPAGE-DEPENDENT ACTIVATION)

SYSTEME D'AUTHENTIFICATION NUMERIQUE PAR PRESENCE PHYSIQUE (ACTIVATION DEPENDANTE D'UNE PAGE WEB)

Patent Applicant/Assignee:

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Legal Representative:

CHOU Chien-Wei (et al) (agent), Oppenheimer Wolff & Donnelly LLP, 1400
Page Mill Road, Palo Alto, CA 94304, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200157623 A2-A3 20010809 (WO 0157623)

Application: WO 2001US4062 20010207 (PCT/WO US0104062)

Priority Application: US 2000180530 20000207; US 2000570399 20000512

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE
ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT
LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM
TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

...infrastructure.

In general, the CSP essentially enables the servers to ask the users to send **digital certificates**. The CSP in the client sends an unsigned **digital certificate**. The server which supports CSP receives the **digital certificate** and sends a random number back to the client to have it digitally signed. The...

...challenge) to the PC across the web.

The PC, through the CSP module, sends a **digital certificate** (which includes the customer's public key) and the electronic card data to a third party CSP server. This third party CSP server functions as a **digital certificate** signing facility and holder of **private keys** of all its members. This CSP server signs the **digital certificate**, signs the random number with the customer's private key, and then sends them back...

...the On-Line Authentication section of the patent specification. The PC then delivers the signed **digital certificate** and random number to the web merchant who checks the signature with the customer's public key.

In an alternative embodiment, the **digital certificate** with the customer's public key could be sent directly to the merchant first. Thereafter...as a loyalty card (for earning and redeeming incentive points), a gift certificate, or an **ATM** card. Each registered user is associated with his own account for each of these uses...

18/3,K/26 (Item 23 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00825039

PHYSICAL PRESENCE DIGITAL AUTHENTICATION SYSTEM (CRYPTO SERVICE PROVIDER (CSP))

SYSTEME D'AUTHENTIFICATION NUMERIQUE DE PRESENCE PHYSIQUE (FOURNISSEUR DE SERVICES CRYPTOGRAPHIQUES (CSP))

Patent Applicant/Assignee:

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(Residence), IL (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

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(Residence), IL (Nationality), (Designated only for: US)

Legal Representative:

Sylvia Keys

15-Jun-05 03:55 PM

... by examining the wireless signal and the device information, and certificate logic for generating a **digital certificate**; and communications logic for sending the **digital certificate** and at least a portion of the device information.

2 The system of claim 1...

...a private key of the user; server communications logic for receiving an authentication request, a **digital certificate**, a number, and user information; and CSP logic for performing authentication of the user information, signing the **digital certificate**, and signing the number with the private key.

12 The server of claim 1...

...user, comprising:
a base station and at least one application, wherein the application transmits a **digital certificate** and user information; and
a crypto service provider (CSP) server accessible on a wide area...
...key of the user, authenticating the user with the user information, and for signing the **digital certificate**.

18/3,K/27 (Item 24 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00825037 **Image available**

PHYSICAL PRESENCE DIGITAL AUTHENTICATION SYSTEM
SYSTEME D'AUTHENTIFICATION NUMERIQUE DE PRESENCE PHYSIQUE

Patent Applicant/Assignee:

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Patent Applicant/Inventor:

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COHEN Moshe, Chovevey 47, Tsivon, Tel-Aviv, IL, IL (Residence), IL
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SEGE Alan, 1518 Euclid Street, #5, Santa Monica, CA 90404, US, US
(Residence), US (Nationality), (Designated only for: US)
ALTIMAN Nathan, Hachashmonaym Street 39, Tel Aviv, IL, IL (Residence), IL
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ANATI Rami, Haetrog Street 16, 38244 Kfar Brandes Haders, IL, IL
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Legal Representative:

CHOU Chien-Wei (et al) (agent), Oppenheimer Wolff & Donnelly LLP, 1400
Page Mill Road, Palo Alto, CA 94304, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200157619 A2-A3 20010809 (WO 0157619)
Application: WO 2001US3868 20010206 (PCT/WO US0103868)
Priority Application: US 2000180530 20000207; US 2000570399 20000512

Designated States:

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AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE
ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT
LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM
TR TT TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

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Fulltext Word Count: 63728

Main International Patent Class: G06F-017/60

Fulltext Availability:

Detailed Description

Detailed Description

... and includes some on-chip or off-chip memory for storing and/or generating a **cryptographic signature**. A Microchip 12C508, 12C672 or higher processing unit is preferred. In one embodiment, a Microchip... merely a randomly generated number. In another embodiment, the transaction confirmation number is actually a **digital signature** of the order number and a public key. A **digital signature** is used to authenticate the identity of the sender (i.e., the third party authentication server) or the signer of the document. The use of the **digital signature** ensures that the signed document cannot be easily repudiated; cannot be imitated by someone else...both parties may want to verify each other for a given transaction.

In either case, **digital certificates** can be used. As known to those skilled in the art, a **digital certificate** is similar to an electronic "credit card" that establishes the certificate user's credentials when...
...or other transactions on the web. It is normally issued by a certification authority. The **digital certificate** contains the user's name, serial number, expiration dates, a copy of the certificate holder's public key, and the **digital signature** of the certificate-issuing authority so that the recipient of the **digital certificate** can verify that the certificate is indeed authentic and real. Some **digital certificates** conform to the X.509 standard.

88

FIG. 33 shows the sequence of steps of...

...the case where the customer wants to verify the merchant. Initially, the merchant sends a **digital certificate** over the web to the customer. The **digital certificate** contains the date of expiration, name of merchant, signature of the certification authority (e.g., Verisign), and the merchant's public key. The customer's PC receives the **digital certificate** and in turn, transmits the **digital certificate** to the customer's electronic card. The electronic card contains standard logic and programming to perform a check to make sure the **digital certificate** is valid. In one embodiment, the electronic card checks to make sure that the **digital certificate** is signed by the certification authority and contains no errors. By verifying that the **digital certificate** is properly signed by the certification authority, the customer is making sure that no one...

have it digitally signed. The...

...challenge) to the PC across the web.

The PC, through the CSP module, sends a **digital certificate** (which includes the customer's public key) and the electronic card data to a third party CSP server. This third party CSP server functions as a **digital certificate** signing facility and holder of **private keys** of all its members. This CSP server signs the **digital certificate**, signs the random number with the customer's private key, and then sends them back...

...the On-Line Authentication section of the patent specification'. The PC then delivers the signed **digital certificate** and random number to the web merchant who checks the signature with the customer's public key.

In an alternative embodiment, the **digital certificate** with the customer's public key could be sent directly to the merchant first. Thereafter...as a loyalty card (for earning and redeeming incentive points), a gift certificate, or an **ATM** card. Each registered user is associated with his own account for each of these uses...

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DIALOG(R)File 349:PCT FULLTEXT
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00789110 **Image available**

**CRYPTOGRAPHIC SERVER WITH PROVISIONS FOR INTEROPERABILITY BETWEEN
CRYPTOGRAPHIC SYSTEMS**
**SERVEUR CRYPTOGRAPHIQUE A FONCTIONS D'INTEROPERABILITE ENTRE SYSTEMES
CRYPTOGRAPHIQUES**

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Patent and Priority Information (Country, Number, Date):

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Application: WO 2000US25816 20000920 (PCT/WO US0025816)

Priority Application: US 99154734 19990920; US 2000200396 20000427

Designated States:

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AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ CZ (utility model) DE DE (utility model) DK DK (utility model) DM DZ EE EE (utility model) ES FI FI (utility model) GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KR (utility model) KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SK (utility model) SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English
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Fulltext Word Count: 31030

International Patent Class: G06F-017/60

Fulltext Availability:

Detailed Description

Claims

Detailed Description

... to identify users, e.g., authentication, to allow access privileges, e.g., authorization, to create **digital certificates** and signatures, and the like. One popular cryptography system is a public-key system that ...the trust engine in order to exercise cryptographic functions, such as, for example, authentication, authorization, **digital signing** and certificates, encryption, notary-like and power-of-attorney-like actions, and the like.

Another...or more keys are associated with a user. The method comprises storing one or more **private keys** on a server, receiving a request for a cryptographic action, and determining a type of...

...has access to the certificate, performing the cryptographic action using one or more of the **private keys** that correspond to the certificate.

,3,

Another aspect of the invention includes a method of...hashing, digitally signing, encrypting and decrypting (often referred to only as encrypting), creating or distributing **digital certificates**, and the like. However, the private cryptographic keys used in the cryptographic functions will not...

...the cryptographic keys may advantageously include some or all of symmetric keys, public keys, and **private keys**. In addition, a skilled artisan will recognize from the disclosure herein that the foregoing keys ...

...certificate authority 115 may advantageously comprise a trusted third-party organization or company that issues **digital certificates**, such as, for example, VeriSign, Baltimore, Entrust, or the like. The trust engine 110 may advantageously transmit requests for **digital certificates**, through one or more conventional **digital certificate** protocols, such as, for example, PKCS10, to the certificate authority 115. In response, the certificate authority 115 will issue a **digital certificate** in one or more ...for example, PKCS7. According to one embodiment of the invention, the trust engine 110 requests **digital certificates** from several or all of the prominent certificate authorities 115 such that the trust engine 110 has access to a **digital certificate** corresponding to the certificate standard of any requesting party.

According to another embodiment, the trust...transmission systems, two-way cable systems, customized private or public computer networks, interactive kiosk networks, **automatic teller machine** networks, direct links, satellite or cellular networks, and the like.

FIGURE 2 illustrates a block...key infrastructure (PKI) functionality. For example, the cryptographic engine 220 may advantageously issue public and **private keys** for users of the cryptographic system 100. In this manner, the cryptographic keys are generated...

...and the response thereof. In addition, the mass storage 225 may be used

least some of the **digital signatures** correspond to differing **digital signature** protocols or standards.

33 The method of Claim 29, wherein the server-side cryptographic functionality...

...or more keys being associated with a user,
the method comprising:
storing one or more **private keys** on a server;
receiving a request for a cryptographic action;
determining a type of certificate the certificate, performing the
cryptographic action using one or more of the **private keys** that
correspond to the certificate.

40 The method of Claim 39, wherein the user owns...

...to the certificate; and performing the cryptographic action using the
one or more of the **private keys** corresponding to the
acquired certificate.

45 The method of Claim 44, wherein the acquiring the...

...the cross-certified certificate, performing the cryptographic action
using the one or more of the **private keys** corresponding to the
cross-certified certificate.

47 The method of Claim 46, wherein the acquiring...

...the cross-certified certificate comprise one or more of the one or more
of the **private keys**.

50 The method of Claim 48, wherein the one or more keys corresponding to
the...

18/3,K/29 (Item 26 from file: 349)
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00789109 **Image available**

SERVER-SIDE IMPLEMENTATION OF A CRYPTOGRAPHIC SYSTEM
INSTALLATION COTE SERVEUR D'UN SYSTEME CRYPTOGRAPHIQUE

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AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ CZ (utility model) DE DE (utility model) DK DK (utility model) DM DZ EE EE (utility model) ES FI FI (utility model) GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KR (utility model) KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SK (utility model) SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

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Fulltext Availability:

Detailed Description

Claims

Detailed Description

... to identify users, e.g., authentication, to allow access privileges, e.g., authorization, to create **digital certificates** and signatures, and the like. One popular cryptography system is a public-key system that ...engine in order to perform authentication and cryptographic functions, such as, for example, authentication, authorization, **digital signing** and generation, storage, and retrieval of certificates, encryption, notary-like and power-of-attorney-like...hashing, digitally signing, encrypting and decrypting (often referred to only as encrypting), creating or distributing **digital certificates**, and the like. However, the private cryptographic keys used in the cryptographic functions will not...

...the cryptographic keys may advantageously include some or all of symmetric keys, public keys, and **private keys**. In addition, a skilled artisan will recognize from ...certificate authority 115 may advantageously comprise a trusted third-party organization or company that issues **digital certificates**, such as, for example, VeriSign, Baltimore, Entrust, or the like. The trust engine 110 may advantageously transmit requests for **digital certificates**, through one or more conventional **digital certificate** protocols, such as, for example, PKCS10, to the certificate authority 115. In response, the certificate authority 115 will issue a **digital certificate** in one or more of a number of differing protocols, such as, for example, PKCS7. According to one embodiment of the invention, the trust engine 110 requests **digital certificates** from several or all of the prominent certificate authorities 115 such that the trust engine 110 has access to a **digital certificate** corresponding to the certificate standard of any requesting party.

According to another embodiment, the trust...transmission systems, two-way cable systems, customized private or public computer networks, interactive kiosk networks, **automatic teller machine** networks, direct links, satellite or cellular networks, and the like.

FIGURE 2 illustrates a block...key infrastructure (PKI) functionality. For example, the cryptographic engine 220 may advantageously issue public and **private keys** for users of the cryptographic system 100. In this manner, the cryptographic keys are generated...
...and the response thereof. In addition, the mass storage 225 may be used to store **digital certificates** having the public key of a user contained therein.

Although the trust engine 110 may advantageously perform authentication and one or more cryptographic functions, such as, for example, **digital signing**.

FIGURE 3 illustrates a block diagram of the transaction engine 205 of FIGURE 2, according...the cryptographic handling module 625 may perform data comparisons, data hashing, data encryption or decryption, **digital signature** verification or creation, **digital certificate** generation, storage, or requests, cryptographic key generation, or the like. Moreover, a skilled artisan will...ID, or the like, and the trusted third party may advantageously include, for example, their **digital signature** in enrollment submission. The trusted third party may include an actual notary, a government agency...

...depositories.

Often during the enrollment process 900, the user will also desire to have a **digital certificate** issued such that he or she may receive encrypted documents from others outside the cryptographic...

...100. As mentioned in the foregoing, the certificate authority 115 generally issues **digital certificates** according to one or more of several conventional standards. Generally, the **digital certificate** includes a public key of the user or system, which is known to everyone.

Whether the user requests a **digital certificate** at enrollment, or at another time, the request is transferred through the trust engine 110.

...the public key. In STEP 945, the cryptographic engine 220 transmits a request for a **digital certificate** to the transaction engine 205. According to one embodiment, the request advantageously includes a standardized request, such as PKCS10, embedded in, for example, and XML document. The request for a **digital certificate** may advantageously correspond to one or more certificate authorities and the one or more standard...

...STEP 950 the transaction engine 205 forwards this request to the certificate

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00788808 **Image available**

ELECTRONIC COMMERCE WITH CRYPTOGRAPHIC AUTHENTICATION
COMMERCE ELECTRONIQUE AVEC AUTHENTICATION CRYPTOGRAPHIQUE

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CZ CZ (utility model) DE DE (utility model) DK DK (utility model) DM DZ
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TM TR TT TZ UA UG UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
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Detailed Description
Claims

Detailed Description

... functions, for instance by requiring a password or PIN number in order
to use an **ATM**. Another form of security is to protect data from being
intercepted and used by those...engine in order to perform authentication
and cryptographic functions, such as, for example, authentication,
authorization, **digital signing** and generation, storage, and retrieval
of certificates, encryption, notary-like and power-ofattorney-like
actions....a vendor, receiving at the trust engine, a request from the

vendor to obtain the **digital signature** of the user, and generating the **digital signature** at the trust engine by using at least one private cryptographic key associated with the...at least a user and a vendor, a request from the vendor to obtain a **digital signature** of the user, and a cryptographic handling module which receives the data and the request, and which generates the **digital signature** by using at least one private cryptographic key associated with the user. Another aspect of...

...entity, receiving at the first entity, a request from the third entity to obtain the **digital signature** of the second entity, and signing at the first entity the transaction data using at...more keys from a plurality of private cryptographic keys stored on a secure server, the **private keys** being unknown to the user. A request for a cryptographic transaction is received from a...hashing, digitally signing, encrypting and decrypting (often referred to only as encrypting), creating or distributing **digital certificates**, and the like. However, the private cryptographic keys used in the cryptographic functions will not...

...the cryptographic keys may advantageously include some or all of symmetric keys, public keys, and **private keys**. In addition, a skilled artisan will recognize from the disclosure herein that the foregoing keys ...

...certificate authority 115 may advantageously comprise a trusted third-party organization or company that issues **digital certificates**, such as, ...Baltimore, Entrust, or the like. The trust engine 110 may advantageously transmit requests for **digital certificates**, through one or more conventional **digital certificate** protocols, such as, for example, PKCSIO, to the certificate authority 115. In response, the certificate authority 115 will issue a **digital certificate** in one or more of a number of differing protocols, such as, for example, PKCS7. According to one embodiment of the invention, the trust engine 110 requests **digital certificates** from several or all of the prominent certificate authorities 115 such that...transmission systems, two-way cable systems, customized private or public computer networks, interactive kiosk networks, **automatic teller machine** networks, direct links, satellite or cellular networks, and the like.

FIGURE 2 illustrates a block...key infrastructure (PKI) functionality. For example, the cryptographic engine 220 may advantageously issue public and **private keys** for users of the cryptographic system 100. In this manner, the cryptographic keys are generated...

...and the response thereof. In addition, the mass storage 225 may be used to store **digital certificates** having the public key of a user contained therein.

Although the trust engine 110 may advantageously perform authentication and one or more cryptographic functions, such as, for example, **digital signing**.

FIGURE 3 illustrates a block diagram of the transaction engine 205 of FIGURE 2, according...the cryptographic handling module 625 may perform data comparisons, data hashing, data encryption or decryption, **digital signature** verification or creation, **digital certificate** generation, storage, or requests, cryptographic key generation, or the like. Moreover, a skilled artisan will...ID, or the like, and the trusted third party may advantageously include, for example, their **digital signature** in enrollment submission. The trusted third party may include an actual notary, a government agency...depositories.

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00788704 **Image available**

CONTEXT SENSITIVE DYNAMIC AUTHENTICATION IN A CRYPTOGRAPHIC SYSTEM
AUTHENTIFICATION DYNAMIQUE SENSIBLE AU CONTEXTE DANS UN SYSTEME
CRYPTOGRAPHIQUE

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model) ES FI FI (utility model) GB GD GE GH GM HR HU ID IL IN IS JP KE KG
KP KR KR (utility model) KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ
NO NZ PL PT RO RU SD SE SG SI SK SK (utility model) SL TJ TM TR TT TZ UA
UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

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Detailed Description

Detailed Description

... functions, for instance by requiring a password or PIN number in order
to use an **ATM**. Another form of security is to protect data from being
intercepted and used by those...engine in order to perform authentication
and cryptographic functions, such as, for example, authentication,
authorization, **digital signing** and generation, storage, and retrieval
of certificates, encryption, notary-like and power-of-attorney-like...
hashing, digitally signing, encrypting and decrypting (often referred to
only as encrypting), creating or distributing **digital certificates**,
and the like. However, the private cryptographic keys used in the
cryptographic functions will not...the cryptographic keys may
advantageously include some or all of symmetric keys, public keys, and
private keys. In addition, a skilled artisan will recognize from the
disclosure herein that the foregoing keys...

...certificate authority 115 may advantageously comprise a trusted
third-party organization or company that issues **digital certificates**,

such as, for example, VeriSign, Baltimore, Entrust, or the like. The trust engine 110 may advantageously transmit requests for **digital certificates**, through one or more conventional **digital certificate** protocols, such as, for example, PKCS10, to the certificate authority 115. In response, the certificate authority 115 will issue a **digital certificate** in one or more of a number of differing protocols, such as, for example, PKCS7. According to one

embodiment of the invention, the trust engine 110 requests **digital certificates** from several or all of the prominent certificate authorities 115 such that the trust engine 110 has access to a **digital certificate** corresponding to the certificate standard of any requesting party.

According to another embodiment, the trust...transmission systems, two-way cable systems, customized private or public computer networks, interactive kiosk networks, **automatic teller machine** networks, direct links, satellite or cellular networks, and the like.

FIGURE 2 illustrates a block...key infrastructure (PKI) functionality. For example, the cryptographic engine 220 may advantageously issue public and **private keys** for users of the cryptographic system 100. In this manner, the cryptographic keys are generated...and the response thereof. In addition, the mass storage 225 may be used to store **digital certificates** having the public key of a user contained therein.

Although the trust engine 110...

...110 may advantageously perform authentication and one or more cryptographic functions, such as, for example, **digital signing**. FIGURE 3 illustrates a block diagram of the transaction engine 205 of FIGURE 2, according...the cryptographic handling module 625 may perform data comparisons, data hashing, data encryption or decryption, **digital signature** verification or creation, **digital certificate** generation, storage, or requests, cryptographic key generation, or the like. Moreover, a skilled artisan will...ID, or the like, and the trusted third party may advantageously include, for example, their **digital signature** in enrollment submission. The trusted third party may include an actual notary, a government agency...

...depositories.

Often during the enrollment process 900, the user will also desire to have a **digital certificate** issued such that he or she may receive encrypted documents from others outside the cryptographic...

...100. As mentioned in the foregoing, the certificate authority 115 generally issues **digital certificates** according to one or more of several conventional standards. Generally, the **digital certificate** includes a public key of the user or system, which is known to everyone.

Whether the user requests a **digital certificate** at enrollment, or at another time, the request is transferred through the trust engine 110...the public key. In STEP 945, the cryptographic engine 220 transmits a request for a **digital certificate** to the transaction engine 205. According to one embodiment, the request advantageously includes a standardized request, such as PKCS10, embedded in, for example, and XML document. The request for a **digital certificate** may advantageously correspond to one or more certificate authorities and the one or more standard...

...otherwise be available. These functions include without limitation:
encryption and decryption of documents; issuance of **digital certificates** ; **digital signing** of documents; verification of **digital signatures** ; and such other operations as will be apparent to those of skill in the art...

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00787038 **Image available**

SYSTEM AND METHOD FOR PROCESSING TOKENLESS BIOMETRIC ELECTRONIC
TRANSMISSIONS USING AN ELECTRONIC RULE MODULE CLEARINGHOUSE
SYSTEME ET PROCEDE PERMETTANT DE TRAITER DES TRANSMISSIONS ELECTRONIQUES
BIOMETRIQUES SANS AUTHENTIFICATION PAR L'UTILISATION D'UN CENTRE DE
MODULES DE REGLEMENT ELECTRONIQUES

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ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT
LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM
TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

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Fulltext Availability:

Claims

Claim

... services, electronic data usage patterns, employee status, job title,
data on user behavior patterns, a **digital certificate** , a network
credential, an internet protocol address, a **digital signature** , an
encryption key, an instant messaging address, personal medical records,
an electronic audio signature, and...different embodiment, processing
comprising of data includes invoking any of the following; a user's
digital certificate , a user's identity scrambler, a user's interactive
electronic consumer loyalty or consumer rewards...

...with the electronic identicator, the identification data comprising any

of the following; a biometric, a **digital certificate**, an internet protocol address, or a biometric input apparatus hardware identification code. In a third...

...services, electronic data usage patterns, employee status, job title, data on user behavior patterns, a **digital certificate**, a network credential, an internet protocol address, a **digital signature**, an encryption key, an instant messaging address, personal medical records, an electronic audio signature, and...thin-client, or other public terminal or kiosk 60 such as an Automated Teller Machine (**ATM**). In a preferred embodiment, the user is identified through biometrics while third-party databases 28 which are accessed to complete the electronic transmission are identified through the verification of a **digital certificate** issued by an authorized certifying authority. Execution of a Rule Module (RM) 50 or an...
...request for access to stored database content, an electronic request to personalize data using a **digital certificate**, or an electronic request to present or display data in a customized format. In sum...is preferably located securely inside the BIA. Communication security is provided by encryption using unique **secret keys** known only to that specific BIA 16 and the DPC, and the DES encryption algorithm...a user's registration with the DPC. Optionally, the BIA 16 also validates public key **digital certificates**. In one embodiment, public keys of a particular certifying authority are initially stored in the...If the third-party is an entity, such as a corporation, it may register a **digital certificate** with the Identifier 12. Third-party **digital certificates** are available from certifying authorities, and they provide the assurance that the entity with the...

...the BIA 16 device records. Preferably, the security surrounding the registration of an entity's **digital certificates** or of the BIA hardware identification codes with the Identifier 12 is extremely strong, as...Identifier using any of the following electronic verification means: a third-party ID Code, a **digital certificate**, an Internet protocol ("IP") ...the following information:

biometric data and personal identification code (PIC)

biometric data alone

digital identification (**digital certificates**)

* BIA hardware identification code

Biometric Identification Subsystem (BID)

In one embodiment of the Identifier, the...comprises multiple processors, each of which is capable of identifying a third-party from their **digital certificates**. In this embodiment, **digital certificates** are used to perform digital identification of a third-party. Preferably, these include corporate web...

...computer and users use their biometrics for identification of the user. Verifying that a particular **digital certificate** is valid requires a public key from the certifying authority that issued that particular **digital certificate**. This requires that the digital identification subsystem have a list of certifying authorities and the public keys used to validate the **digital certificates** they issue. This table must be secure, and the keys stored therein must be kept up to date. These processes and others relating to the actual process for validating **digital certificates** are well understood in the industry.

BIA Hardware Identification Subsystem (BH1)

In a preferred embodiment...employee status; job title; pre-set data on a user's current activity patterns; a **digital certificate**; a network credential; an Internet protocol address; a **digital signature**; an encryption key; an instant messaging address; personal medical records;

an electronic audio signature; and...required, an Execution Command 52 governs the appending of a user-unique network credential or **digital certificate** to an electronic transmission. If a user employing a biometric seeks to append their **digital certificate** to an electronic transmission, the user stores at least one command to sign electronic documents using their **private keys**, which are themselves centrally stored on an Clearinghouse 14 server. As such, the user's **private keys** are invoked as a header for the user's electronic transmission which, in combination with the electronic document itself and an MD5 calculation of the document, together form a **digital signature**. At a later time, an authorized recipient can use the user's public key from...

...secure, authenticated electronic transmission. In this way, users do not have to manage their own **private keys**, nor do they have to retain physical possession of their **digital certificates** via smart cards or personal computers with resident user-customized data. In one embodiment, public...instruct that these messages are automatically appended with both his personal visual trademark icon and **digital certificate**, both of which are stored in the Clearinghouse. This provides both user-customized visually graphical...a master Identifier is responsible for storage of the entire set of biometric samples and **digital certificates** registered for use with this invention. The master Clearinghouse 14 is responsible for storage of samples and **digital certificates** registered for use with this invention. Local Clearinghouse 14 servers store subsets of the entire...services, electronic data usage patterns, employee status, job title, data on user behavior patterns, a **digital certificate**, a network credential, an Internet protocol address, a **digital signature**, an encryption key, an instant messaging address, personal medical records, an electronic audio signature, and...

...The method of claim 13, wherein said processing comprising invoking the following; a user's **digital certificate**, a user's identity scrambler, a user's interactive electronic consumer loyalty or consumer...the electronic identifier (12), the identification data comprising any of the following; a biometric, a **digital certificate**, an Internet protocol address, or a biometric input apparatus hardware identification code.

19 The method...

...services, electronic data usage patterns, employee status, job title, data on user behavior patterns, a **digital certificate**, a network credential, an Internet protocol address, a **digital signature**, an encryption key, an instant messaging address, personal medical records, an electronic audio signature, and...

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00752038 **Image available**

CRYPTOGRAPHIC DEVICE AND METHOD FOR ASSURING INTEGRITY OF TRUSTED AGENT COMMUNICATIONS

DISPOSITIF CRYPTOGRAPHIQUE ET PROCEDURE ASSURANT L'INTEGRITE DES COMMUNICATIONS D'AGENT DE CONFIANCE

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Sylvia Keys

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Priority Application: US 99298360 19990423

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(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES
FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU
LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT
TZ UA UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 5702

Main International Patent Class: G06F-001/00

Fulltext Availability:

Detailed Description

Claims

Detailed Description

... that a digital platform is operating as intended.

Encrypting the communication channels or using conventional **digital
signatures** may prevent content from being unknowingly modified during
transmission; however, these techniques do not provide...

...the operations for recovering the combined result, inclusive of TAEH and
MH, from the notary **digital signature**.

Figure 8 is an illustrative block diagram of an embodiment of the present
invention in...

...content" is generally defined as (i) control information (e.g., Internet
Protocol "IP" commands, keys, **digital signatures**, **digital
certificates**, etc.), and/or (ii) data in the form of a still image,
video (e.g., Adleman "RSA" based functions), or even a function for
digitally signing information (e.g., **Digital Signature Algorithm**
"DSA" or a RSA-based signing functions).

In addition, a "**digital certificate**" is generally defined as any
information used for authentication. Normally, this information includes
a public...

...includes any person or entity in a position of trust to guarantee or
sponsor the **digital certificate**.

...provider, comprising:
receiving a selected trusted agent executable by the platform; and
providing a notary **digital signature** to the content provider, the
notary **digital signature** including a combined result of a hash value
of a message and a hash value...

...cryptographic device.
17 The method of claim 16, wherein the combined result of the notary
digital signature further includes an assertion to indicate a purpose
of the notary **digital signature** .

18 The method of claim 17 further comprising:
providing the message and a device certificate...

...the hash value of the selected trusted agent executable and the
assertion from the notary **digital signature** .

19 The method of claim 18 further comprising:
performing a hash operation on a copy...

...kernel in communication with the trusted agent executable, the security
kernel to generate a notary **digital signature** including a hash
function of the trusted agent executable and an assertion being data to
indicate a purpose of the notary **digital signature** .

loo
HEAD-END -Z-----,, DIGITAL PLATFORM
EQUIPMENT
110 130
120
250
Figure 2
cn
C...

18/3,K/34 (Item 31 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00742422 **Image available**

SYSTEMS FOR FINANCIAL AND ELECTRONIC COMMERCE
SYSTEMES PERMETTANT DE REALISER DES OPERATIONS FINANCIERES ET COMMERCIALES
SUR INTERNET

Patent Applicant/Inventor:

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Legal Representative:

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200055793 A1 20000921 (WO 0055793)

Application: WO 2000US7457 20000320 (PCT/WO US0007457)

Priority Application: US 99125008 19990318; US 99280483 19990330; US
99130600 19990422; US 99130599 19990422; US 99138428 19990610; US
99139167 19990615; US 99369902 19990806; US 99161283 19991025; US
99165231 19991111

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AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB
GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA
MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA
UG US UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 45238

Main International Patent Class: **G06F-017/60**

Fulltext Availability:

Detailed Description

Claims

Detailed Description

... summarizing the use of a website as a webbank to wire transfer funds to an **ATM** machine or a programmable financial card, in accordance with further embodiments of the present invention...bank owner.

One important example of such a new form of financial transaction is the **ATM** wire transfers, a function currently unavailable in the traditional banking system. This function is a type of wire transfer in which a webbank owner can wire money to any **ATM** machine. Thus, a webbank owner can wire funds to any individual or third party which that individual can quickly pickup at an **ATM**.

The webbank TM further serves as a member of the mi'lliliweb TM a virtual ...

...providing users with "the best of both worlds", interact wit including the ability to use **ATM** machines, traditional banks, and the other banking products and services associated with traditional banks.

The...known, This identity information can be verified to the extent desired. In a further embodiment, **digital signatures** and **digital certificates** can be used for further verification purposes, if desired.

B. Maintenance of Funds and Records on...existing financial networks such as the networks used to process credit card transactions, wire transfers, **ATM** withdrawals and so forth. The metabank membership in existing networks with the concurrent use of...parameter desired can be encoded into the numbers

36

corresponding to certain funds, using a **secret keys** or systems known only to the metabank overseer bank, with the overseer bank checking a... the card is stolen, and can otherwise be tracked, modified, and programmed as desired.

D. **ATM** Wire Transfers

In one embodiment, a webbank owner or user can quickly and easily wire money to any **ATM** machine, providing a third party (or even him or herself) with the ability to pick...

...the country or the globe, which the recipient can receive merely by locating a nearby **ATM** (on the appropriate network, whether Cirrus or NYCE, or so forth). The embodiment is particularly...

...computer at work, a public terminal or kiosk, etc.) or even access just to an **ATM** machine, or even if the person merely wishes to shop somewhere that accepts credit or...herein.

j

In a preferred embodiment, the systems used employ identification (e.g. by using **digital certificates**), authentication (e.g. by using **digital signatures**), nonrepudiation, verification and privacy. The systems used preferably make use of the processor serial number...

...of that card in the same manner that a card would be withdrawn from an **ATM**

73

machine. The cashier verifies the funds on the card by accessing the webbank over...Examples of magnetic stripe cards include but are not limited to, credit cards, debit cards, **ATM** cards, identification cards, photocopier cards, transportation cards, and so forth. Likewise, although the term credit...be any credit card number, debit card number, bank card number (for use in an **ATM** machine), webbank number or address, or so forth, allowing the optical disk to have information...which can be programmed on a personal computer, and which can also be used at **ATM** machines (e.g. to check account information or withdraw funds), can be swiped through a...

Claim

... forwire transferring money, comprising:
providing a systemforconsumers overtheInternet; saidsystemallowingthe consumerto wire transfer funds to an **ATM** machine for retrieval of cash from said **ATM** machine.

37 A method as claimed in Claim 36, wherein said funds are retrieved using...

...drive

(e.g. for recording orwriting on an optical disk which serves as the card)

ATM Wire Transfers and Programmable Card Transfers
User accesses financial institution and user's account
(e...)

...webbank over the Internet)

i

User links account or portion thereof to number on debit, **ATM** or credit card, including programmable credit or debit card

I

Recipient uses card to withdraw funds from an **ATM** machine, or to engage in traditional or online transactions

i ing

A website is provided...

18/3,K/35 (Item 32 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00557635 **Image available**
AN ON-LINE INCENTIVE SYSTEM

SYSTEME DE PRIMES EN LIGNE

Patent Applicant/Assignee:

NETCENTIVES INC,

Inventor(s):

CATLIN Timothy J O,

ROWNEY Kevin T,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200021008 A1 20000413 (WO 0021008)

Application: WO 99US23077 19991005 (PCT/WO US9923077)

Priority Application: US 98167315 19981006

Designated States:

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AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB
GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD
MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG
UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ
TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI
CM GA GN GW ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 11778

Main International Patent Class: G06F-017/60

Fulltext Availability:

Detailed Description

Detailed Description

... such as credit information, from a customer to a clearinghouse. For example, credit cards and **automatic teller machines (ATM)** cards are used in a secure fashion to transfer financial information from a consumer 'to...the perimeter security of the merchant's location, provides a secure location to maintain the **secret keys**.

As shown in block 520 of Figure 5, the remote incentive management system signs the encrypted message using a signature key. A **digital signature** technique is a well known technique to authenticate a message. As is well known, a **digital signature** is derived from the specific message, as well as the merchant's secret key. Specifically, the use of a **digital signature** authenticates that the message originated from the merchant, and thus the **digital signature** detects any tampering of the message that may have occurred over the open Internet.

As...

...Figure 3). As shown in block 610, the clearinghouse incentive system validates the merchant's **digital signature** on the RFA message. In general, this step includes executing an algorithm to ascertain whether ...response message, as well as verifies the authenticity of the message through analysis of the **digital signature** as shown in block 670. The status of the message, as indicated in the response...merchant's earning activities, an identification (ID) to uniquely identify the consumer, and/or a **digital certificate**. In one embodiment, the **digital certificate** conforms to a **digital certificate** as defined by the standard x509 As shown in blocks 810 and 870, if the...

18/3,K/36 (Item 33 from file: 349)

Sylvia Keys

15-Jun-05 04:03 PM

DIALOG(R)File 349:PCT FULLTEXT
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00530637 **Image available**

METHOD AND SYSTEM FOR SECURE TRANSACTIONS IN A COMPUTER SYSTEM
PROCEDE ET SYSTEME PERMETTANT D'EFFECTUER DES TRANSACTIONS FIABLES DANS UN
SYSTEME INFORMATIQUE

Patent Applicant/Assignee:

N*ABLE TECHNOLOGIES INC,

Inventor(s):

VEIL Leonard Scott,

WARD Gary Paul,

WEISS Richard Alan,

MURRAY Eric Alan,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9961989 A1 19991202

Application: WO 99US10641 19990513 (PCT/WO US9910641)

Priority Application: US 9884078 19980522

Designated States:

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AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE
GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK
MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU
ZA ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH
CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW
ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 11948

Main International Patent Class: G06F-012/14

International Patent Class: G06F-013/00 ...

... G06F-015/00 ...

... G06F-015/16 ...

... G06F-007/00 ...

... G06F-001/16

Fulltext Availability:

Detailed Description

English Abstract

...functionality only for storing sensitive data including account number and private-key and for providing **digital signatures** to prove participation. Smart cards can also carry biometric data.

Detailed Description

... in functionality only for storing sensitive data including account number and privatekey and for providing **digital signatures** to prove participation. Moreover, smart cards can carry biometric data to be recognized by the...accordance with the present invention. 1 0 Figure 7 is a flow diagram of the **digital signing** process for authenticating electronic transactions in the system with the security co-processor.

Figure 8...available in the public domain. The private-key is sensitive data personal to its owner. **Private - keys** are provided to individuals on smart cards issued to them by organizations such as banks, credit companies, employers, etc.

A **digital certificate** binds the key-pair to a name thus providing a digital identity. The **digital certificate** is used to verify that the public-key belongs to the particular individual using it...

...conventional certificate structure conforms, for example, with the X509.v3 standard certificate structure. A conventional **digital certificate** 500 includes a user name 502, a certificate validity date 504, and the public-key...

...key, can use the public-key to decipher the message and know who sent it. **Digital certificates** allow authenticating messages by tracing the messages to their source. Typically, a certificate chain is...a sender of transaction messages by traversing upwards through the certificate chain. In checking the **digital certificate** in someone's message, A. Doe can check if there is a valid digital identity in the person's **digital certificate**. That is, A. Doe can check if in J. Yen's message there are valid...104.

In yet another embodiment, the secure computing environment 104 can operate as a personal **automatic teller machine (ATM)** system that can be used for general purpose or commercial electronic transactions which do not require a full keyboard capability. The **ATM** includes a dedicated trusted keypad 130 interfaced through an RS 232 interface (not shown) and...

...responds with purchase parameters 308 including a credit card brand identifier, a transaction language, a **digital signature** method such ...the digital identities 3 14 of the electronic transaction parties, typically in the form of **digital certificates**. The security co-processor 122 responds with an identities valid message 316. During processing of...

...Computer 1 14 hands this message to the security coprocessor 1 12, which verifies the **cryptographic signature** on it to validate the electronic transaction party. The resulting verified authorization or denial message ...key and sensitive data such as, an account number (e.g., debit account), and the **digital certificate** which is equivalent to the digital identity and within which the public-key is embedded...in conjunction with Figure 4 above) reads from the smart card the account number, the **digital certificate** and, optionally, the private-key into the security co-processor (122), and then it prompts...

...amount. The message is then electronically signed.

Figure 7 is a flow diagram of the **digital signing** process for authenticating electronic transactions in the system with the security co-processor. First, a...

...sensitive data is performed, via step 550. For reasons rooted in common security industry practice, **private - keys** should never come off the smart cards. This is why the hash output is handed...

...the biometric data therefore is never resident in the nonsecure computing environment.

Pre-verification of **digital certificates** of transacting parties saves verification processing time especially in a high volume, high frequency electronic transactions environment. Pre-verified **digital certificates** of transacting parties can be stored for future accelerated use (without having to repeat the...

...a RAM. The trusted certificate cache in the secure computing environment holds the pre-verified **digital certificates** which, by reason of the interface, cannot be compromised. Once a **digital certificate** has been verified, an API command can be used to store the certificate in the...

...chains. To verify the issuer's signature on a certificate requires a computationally very expensive **cryptographic signature** verification. Certificate caching means that the expensive signature verification only has to occur once, at...

...device external to the security co-processor 400 (a 128 KBytes memory). Encrypted sensitive data, **digital certificates** and temporary variables are stored in the external RAM 602. It would take an expensive ...

...can be also used for the trusted certificate cache 604 for holding the pre-approved **digital certificates**. To further discuss this feature refer now to Figures 8 and 9 together.

A **digital certificate** has a validity period during which it is valid. Some certificates also have additional validity...in the security coprocessor. Building the trusted certificate cache begins by waiting for a new **digital certificate**, via step 700. With each new certificate the process repeats. Once a certificate is received...

18/3,K/37 (Item 34 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00478132 **Image available**

SYSTEM AND METHOD FOR HANDLING PERMITS

SYSTEME ET PROCEDE DE TRAITEMENT D'AUTORISATIONS

Patent Applicant/Assignee:

BARKAN Mordhai,

Inventor(s):

BARKAN Mordhai,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9909484 A1 19990225

Application: WO 98IL380 19980813 (PCT/WO IL9800380)

Priority Application: IL 121550 19970814

Designated States:

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AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM
HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX
NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW GH
GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES
FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN
TD TG

Publication Language: English

Fulltext Word Count: 10455

Main International Patent Class: G06F-013/00

Fulltext Availability:

Detailed Description

Claims

Detailed Description

... impostor or someone who has no authorization to ask for that permit. For example, an **ATM** machine which was tampered with, to deliver the details of credit cards with the PIN... attachment the authorization to issue that permit, from a higher authority. The authorization includes the **digital signature** of that authority, to attest to the legitimacy of that permit issuance.

The method facilitates...methods.

either the document is encrypted with the private key of the issuer, or a **digital signature** is added to the document, with the document itself not being encrypted. Throughout the present...

...of certificates and permits may be detailed, it should be understood that either encryption or **digital signature** of these documents is possible.

The first method may include encryption of the certificate with...

...activity or related information, that is information about that permit and/or the permit holder.

Digital signature may include the computation of a hash of the certificate or permit, and encryption of...In any organization, firm or other entity there is an established final authority there. The **digital signature** of that authority is recognized by all those involved with permits in that organization or... more usable.

5. The permit issuer changes his encryption keys, that is the public and **private keys**. The new permits will be encrypted with the new private key by the permit issuer...forge permits there. This can be addressed by the firm changing their public and **private keys**, with center 2 attesting to that change, as detailed in my prior application.

A special...

...the identification and public key for a user. Each certificate is attested to with the **digital signature** of center 2. A user may be any entity, for example a private person, a commercial firm or an university.

Digital signatures used at center 2 may include encryption with the private (secret) key of center 2...relating to the recipient preferably includes information relating to that recipient's certificate. A **digital**

certificate uniquely identifies a specific person, so that a permit together with that user's certificate...In the latter option, the permit is not encrypted, but is made secure with a **digital signature** which is prepared and added to the permit.

Each signature includes a hash of the...

Claim

... claim 4, wherein the means to attest to its authenticity comprise an addition of a **digital signature**, including a hash of the permit which

is encrypted with a private key of said...preparat:l-In by encrypting the message prepared in step (B) above or adding a **digital signature** to said message, by an authorized person using their private key for that facility; and...

18/3,K/38 (Item 35 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00424459 **Image available**

PAYMENT AND TRANSACTIONS IN ELECTRONIC COMMERCE SYSTEM

PAIEMENT ET TRANSACTIONS DANS UN SYSTEME DE COMMERCE ELECTRONIQUE

Patent Applicant/Assignee:

CERTCO LLC,

Inventor(s):

KRAVITZ David William,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9814921 A1 19980409

Application: WO 97US16930 19971001 (PCT/WO US9716930)

Priority Application: US 96726434 19961004

Designated States:

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AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU
IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL
PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW GH KE LS MW SD
SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT
LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Publication Language: English

Fulltext Word Count: 29178

International Patent Class: **G06F-17:60**

Fulltext Availability:

Detailed Description

Claims

Detailed Description

... amount of money stored in the device. A customer connects with a bank through an **ATM** or equivalent and withdraws money from his bank account and the value of the withdrawal...records must be held until all of the merchant's devices have been to an **ATM** .

Another problem with the system is that if a transaction has gone through several hands...funding. Therefore, they have relatively lower transaction costs as compared to credit systems. Typically, an **ATM** transaction costs \$0.50, or less, and an ACH transaction costs less than \$0 Only...

...systems. Debit systems may employ public key cryptography schemes for security and a variety of **digital signature** algorithms for authentication.

This level of security allows debit systems to operate freely over open...agent and the customer and merchant status information, the payment advice message bearing a verifiable **digital signature** of

the agent over part of its content.

The customer then forwards a portion of...

...the portion of the payment advice message.

The merchant can verify the validity of the **digital signature** contained in the received payment advice message portion.

In another aspect, this invention is a...

...The agent then issues to the customer a payment advice message which bears a verifiable **digital signature** computed over part of its content, the issuing by the agent being based only on...This customer account must typically be funded before purchases can be made, for example through **ATM** 122, although actual funding is outside the scope of the payment system. The customer's...exponent is for efficiency only and should be considered optional.

- 43

As stated in the **Digital Signature** Standard FIPS document, DSA parameters can be generated in such a way as to allow of **digital certificates** issued by certifying authorities (public key certificates) is well-known and is described in various...are not used in communications between the customer and merchant.

All security-related quantities, especially **private keys**, should be held in memory for as short a time as is possible. After their...of g , p , and Y_{CTA} (the CTA's public key component) are contained in a **digital certificate** issued to the CTA 102 and signed by the CA 124. The certificate is transmitted...a public/private key pair. The private key is used by the customer to generate **digital signatures**. The public key is used by the CTA 102 to verify **digital signatures** from the customer.

The customer private DSA key is randomly generated as part of the...for use by a particular merchant. Unlike the customer, however, the merchant is issued a **digital certificate** signed by the MCC 114. This certificate conveys the MCC's trust in the identity...

Claim

... and on status information which the agent has, the payment advice message bearing a verifiable **digital signature** of the agent over part of its content.

19 A method as in claim 18...

...in claim 19 further comprising

the step of:
the merchant verifying the validity of the
digital signature contained in the received payment
advice message portion.

21 A method as in claim 18...issuing by the agent to the customer a
payment
advice message which bears a verifiable **digital
signature** computed over part of its content, the
issuing being based only on the payment request...

18/3,K/39 (Item 36 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00349452 **Image available**

ELECTRONIC FUNDS TRANSFER INSTRUMENTS
INSTRUMENTS ELECTRONIQUES DE TRANSFERT DE FONDS

Patent Applicant/Assignee:

FINANCIAL SERVICES TECHNOLOGY CONSORTIUM,
DOGGETT John,
JAFTE Frank A,
ANDERSON Milton M,

Inventor(s):

DOGGETT John,
JAFTE Frank A,
ANDERSON Milton M,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9631965 A1 19961010
Application: WO 96US4771 19960408 (PCT/WO US9604771)
Priority Application: US 95418190 19950407

Designated States:

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prior to 2004)

BR CA JP MX US AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Publication Language: English

International Patent Class: G06F-17:60 ...

... G06F-07:00

Fulltext Availability:

Detailed Description

Claims

Detailed Description

... intermediary. The EFT system
may be used in conjunction with the ACH system described
above

Automatic teller machines (ATM) and point of sale
(POS) devices allow an individual to conduct a
transaction from a location outside the home. **ATM 's** have
remote computer terminals connected to the user's bank
which allow access, directly...credit card. The smart card is portable
and may be easily used in POS and **ATM** environments

Summary

In general, in one aspect, the invention features
a computer-based method in...the payee, and the amount to be paid. Then,
in a secure hardware token, a **digital signature** is
appended to the data

In general, in another aspect, the invention
features a computer...

...instrument in digital form into a secure hardware
token and, in the token, appending a **digital signature** to
the digital information

In general, in another aspect, the invention
features a computer-based...features a computer-based method for reducing
fraud

associated with an electronic payment instrument. A

cryptographic signature associated with a party to the
instrument is appended to the instrument. Upon receipt
of an electronic payment instrument, there is automatic
checking of the **cryptographic signature** against
cryptographic signature information of other electronic
payment instruments previously received

Advantages of the invention may include one...that can be initiated
from a variety of devices, such as a personal computer,
screenphone, **ATM** or payments accounting system

Financial accounts may be rapidly and securely settled
between trading partners...to the financial
payments and bank clearing networks in a secure fashion.
The use of **digital signatures**, hardware based signing,
and banks as certification agents, make the instruments
trusted and secure. They are tamper-resistant due to th
use of **cryptographic signatures**. This will provide
greater security and reduced fraud losses for all parties
in the payments...enables easy
electronic authentication by a payee, and the payee's and
payer's banks. **Digital signatures** can be validated
automatically

Since the system can be fully automated, and new

processing can...of a portion of an
electronic check

Figure 8 is a format of a digital **cryptographic**
signature based on DDS

Figure 9 is a block diagram ...which in some respects mimics the paper
check.

It is initiated and routed electronically, uses **digital**
signatures for signing and endorsing, and relies on
digital cryptographic certificates to authenticate the
payer and...be initiated by the payer 12 only. The
memorandum 66 may contain the payee's **digital signature** ,
which may be generated by the payee's secure
authenticator 68 using public ...payee's signature by using the
payer's public key to verify the payee's **digital**
signature and thus authenticates the payee 14. To
proceed with the transaction, the payer 12 electronically...of the
instrument 74 from the payer
12, the payee 14 validates the payee's **digital signature**
using ...payer 12, if
necessary. The payee 14 endorses the instrument 74 with
the payee's **digital signature** using its authenticator 68

In effect, this enables the payee 14 digitally to sign
the...receives the endorsed
instrument 74 deposited by the payee 14, validates both
the payee's **digital signature** of endorsement and the
payer's original **digital signature** using public key
cryptography, verifies that the instrument 74 is not a
recent duplicate and...

...payer's bank 82 via existing
electronic settlement procedures, e.g., bilateral
arrangement, ECP, ACH, **ATM** , EFT, or check imaging. The
settlement procedures are carried out over a network 80
connecting ...The PCMCIA card
or 96 is an electronic device that acts as the user's
digital signature card, provides a secure means for
generating a signature with a private signature key, and...

...checkbook. Alternatively, the

18/3,K/40 (Item 37 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00318445

SECURE DATA PROCESSOR WITH CRYPTOGRAPHY AND TAMPER DETECTION
PROCESSEUR DE DONNEES SECURISE A DETECTION DE CRYPTOGRAPHIE ET DE FRAUDE

Patent Applicant/Assignee:

NATIONAL SEMICONDUCTOR CORPORATION,

Inventor(s):

FORCE Gordon,
DAVIS Timothy D,
DUNCAN Richard L,
NORCROSS Thomas M,
SHAY Michael J,
SHORT Timothy A,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9600953 A2 19960111

Application: WO 95US5582 19950505 (PCT/WO US9505582)

Priority Application: US 94267788 19940628

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

DE KR AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

Publication Language: English

Fulltext Word Count: 19860

Main International Patent Class: G06F-012/14

International Patent Class: G06F-01:00

Fulltext Availability:

Detailed Description

Detailed Description

... easily distributed

3

across physical boundaries. For example, the SPU Could be incorporated into an **ATM** card (and in **ATM** machines throughout the world), thereby implementing a

Reflecting this Programmable Distributed Personal Security (PDPS) design ...information and the processing based on that information. It securely creates, stores and/or deploys **secret keys** or algorithms used in the encryption and

:D

decryption of information. For example, although keys...

...the

4

SPU at manufacture time, keys may also be created onboard the SPU, including **secret keys** or private/public key pairs, as master keys, for various applications, for particular sessions within...

...access card, holding information decryption keys, transaction records, credit and account information, one's own **private keys**, and **digital certificates**. About the size of a standard credit card, such access cards Could perform a variety...

...encryption capability supporting the major cryptographic standards, secure key exchange, secure storage of private and **secret keys**, algorithms, certificates or, for example, transaction records or biometric data, verifiability of data and messages...encryption schemes

have been proposed, such as where a user creates and authenticates a secure **digital signature** , which is very difficult to forge and thus equally difficult to repudiate. Because of a ...Clock 5 provides the optimal calibration input.

This calibration is accomplished at the same time **secret keys** are installed and can only be done in the manufacturing mode. The final set frequency...SPU.

One aspect of the present invention is an inverting key storage arrangement wherein the **secret keys** are periodically inverted. As a result, the net average charge across all memory cells is...

20/3,K/1 (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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01224574 **Image available**

MONEY DISPENSING SYSTEM

SYSTEME DE DISTRIBUTION D'ARGENT

Patent Applicant/Assignee:

GARY WILLIAMS RETAIL SOLUTIONS INC, 370 17th Street, Suite 5300, Denver,
CO 80202, US, US (Residence), -- (Nationality), (For all designated
states except: US)

Patent Applicant/Inventor:

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only for: US)

SWAPP Edward M, US, US (Residence), US (Nationality), (Designated only
for: US)

KUROWSKI Michael, US (Residence), US (Nationality), (Designated only for:
US)

Legal Representative:

MARSH FISCHMANN & BREYFOGLE LLP (agent), Russell T. Manning, 3151 South
Vaughn Way, Suite 411, Aurora, CO 80014, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200531659 A2 20050407 (WO 0531659)

Application: WO 2004US31619 20040924 (PCT/WO US04031619)

Priority Application: US 2003505779 20030925

Designated States:

(All protection types applied unless otherwise stated - for applications
2004+)

AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM
DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC
LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO
RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PL PT RO
SE SI SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) BW GH GM KE LS MW MZ NA SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 9997

Fulltext Availability:

Detailed Description

Claims

Detailed Description

... and coins. The system 24 which may be, for example, a cash machine
manufactured by **Diebold , Inc .** of Canton, Ohio. The cash machine will
generally include: a dispenser display 44 for displaying...

...dimes, nickels and pennies. The cash machine may also include additional
features associated with conventional **ATM** 's. For example, the cash
machine may provide cash withdrawal functions, check depositing
functions, balance...or

substantially integral alarm system 223. For example, the change
dispenser 224 may be an **ATM** -type machine, such as that manufactured by
Diebold , Inc ., having an

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integral security system (e.g., alarm systems) that includes integral
camera surveillance...

Claim

... wherein said money dispensing machine is
further operative to function as an automated teller machine (ATM).
31
. A money managing system for use in connection with a food service
business, comprising...

20/3,K/2 (Item 2 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2005 WIPO/Univentio. All rts. reserv.

01137380 **Image available**

A CURRENCY DISPENSE AND CONTROL SYSTEM WITH ANTI-THEFT FEATURES

**SYSTEME DE DISTRIBUTION ET DE COMMANDE DE BILLETS DE BANQUE A
CARACTERISTIQUES ANTIVOL**

Patent Applicant/Assignee:

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97229, US, US (Residence), US (Nationality), (For all designated states
except: US)

Patent Applicant/Inventor:

BOSCH Samuel H, 20055 NW Nestucca Drive, Portland, OR 97229, US, US
(Residence), US (Nationality), (Designated only for: US)
BOSCH Jonathan H, 875 NE 1st Place, Hillsboro, OR 97124, US, US
(Residence), US (Nationality), (Designated only for: US)

Legal Representative:

SZCZERBICKI Sandra K (agent), Stoel Rives LLP, 900 SW Fifth Avenue, Suite
2600, Portland, OR 97204-1268, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200459553 A1 20040715 (WO 0459553)
Application: WO 2003US40288 20031216 (PCT/WO US03040288)
Priority Application: US 2002433906 20021216

Designated States:

(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM
DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC
LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU
SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE
SI SK TR
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
(AP) BW GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 6497

Fulltext Availability:

Detailed Description
Claims

English Abstract

...system (CDCS) 10 securely dispenses paper money in one of the
following modules (1) an ATM system and (2) a currency control system
38 that allows a merchant or merchant-approved employee to withdraw cash
from the CDCS 10 independent of a standard ATM electronic fund transfer
(EFT) network. The CDCS may also include the following functionalities: a
duress...

Detailed Description

Sylvia Keys

15-Jun-05 04:27 PM

... and control system (CDCS), and more particularly, to a CDCS including an automated teller machine (**ATM**) system and a currency control system that effects time-delayed dispensation of on-site currency...

...from a user's bank account. The primary vendors are Docutel, Inc. of Dallas, Texas; **Diebold , Inc .** (Diebold) of North Canton, Ohio; IBM of New York; and NCR Corporation (NCR) of Dayton...

...having a business relationship with a bank. In about 1992, Tidel produced a dial-up **ATM** , which was based on a combination of the company's tube dispensing, cash-control safe...

...an off-the-shelf Verifone credit/debit card point-of-sale terminal. Although the resulting **ATM** had limited capabilities in comparison with the Diebold and IBM ATMs, it cost only approximately...

...the market. These three companies are now the most successful vendors in the United States **ATM** market. The newest **ATM** products, whose sales number in the hundreds of thousands, are not true ATMs, but rather...

...robberies of commercial establishments having electronic gaming stations. The high cost of purchasing both an **ATM** and a time-release safe limits many merchants from purchasing both machines. Further, both machines...

...station winners.

[0010] Thus the present inventors recognized a need for a CDCS including an **ATM** system and a controlled-access dispensing safe. Tidel invented a cash dispensing system that "emulates an **ATM** to access and perform transactions through the EFT system and activates a printer to issue...

...inventors of the present invention recognized a need for a cost-effective CDCS including an **ATM** system and a controlled-access dispensing safe that operates independent of an EFT network and...

...and control system (CDCS). In a preferred embodiment, the CDCS includes an automated teller machine (**ATM**) system and a controlled currency control system

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that operates independent of an electronic fund transfer (EFT) network and that securely dispenses cash.

[0013] The CDCS includes (1) an **ATM** system and (2) a currency control system that effects dispensation of on-site currency independent...

...The currency control system may also receive currency for immediate storage or disbursement through the **ATM** or currency control portions of the CDCS.

[0014] The currency control system may also include...

...functional portions of an exemplary CDCS of the present invention and the interaction between the **ATM** system and the currency control system.

[0019] Fig. 2 is a flow diagram showing an...

...an exemplary preferred CDCS 10 is capable of performing both traditional automated teller machine (**ATM**) transactions and

the need to purchase both machines. Using CDCS 10, merchants can quickly remit...

...system 38 of CDCS 1 0 is faster and more reliable than using prior art **ATM** /time-release safe terminals.

[0040] It will be obvious to those having skill in the...

Claim

... is located peripherally to the portion of the currency dispense and control system housing the **ATM** system.

17 The currency dispense and control system of claim 1 , in which the currency control system and the **ATM** system share a single set of currency dispense and control system hardware.

18 The currency dispense and control system of claim 1 , in which the currency control system and the **ATM** system have separate hardware.

19 The currency dispense and control system of claim 1 , in...

...alphanumeric code.

16

. A currency dispense and control system that securely dispenses currency, comprising:
an **ATM** system including **ATM** hardware assembled, interconnected, and operated to interface with and utilize an electronic fund transfer system

...

...27 A currency dispense and control system that securely receives and dispenses currency, comprising:
an **ATM** system that (1) magnetically reads data in a magnetic stripe of a user account identification...

20/3,K/3 (Item 3 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00510343 **Image available**

SOFTWARE LOADING SYSTEM FOR AN AUTOMATIC FUNDS PROCESSING SYSTEM
SYSTEME DE CHARGEMENT DE LOGICIELS, DESTINE A UN SYSTEME DE TRAITEMENT
AUTOMATIQUE DE FONDS

Patent Applicant/Assignee:

CUMMINS-ALLISON CORP,

Inventor(s):

MAZUR Richard A,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9941695 A1 19990819

Application: WO 99US2616 19990208 (PCT/WO US9902616)

Priority Application: US 9822431 19980212

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH
GM HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW
MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW GH
GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES
FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN
TD TG

Publication Language: English
Fulltext Word Count: 55707

Fulltext Availability:
Detailed Description

Detailed Description

... INVENTION

The present invention relates to automatic software loading for funds processing systems such as **automatic teller machines** and currency redemption machines.

SUMMARY OF THE INVENTION

The primary object of the present invention is to provide an improved **automatic teller machine** ("ATM") or currency redemption machine that is capable of processing cash deposits as well as withdrawals...

...operation of the currency

processing system;

FIG. 1 b is a perspective view of an **automatic teller machine** embodying the present invention;

FIG. 1 c is a diagrammatic side elevation of the machine...for a long period of time while the deposit is verified as occurs in typical **ATM** systems. Also, the system is capable of depositing the received amount amongst remote locations and...that conveys those coins to the coin-return slot 4 at the front of the **ATM**. While FIGS. 67-70 illustrate only a single exit chute, it will be apparent that... Pennsylvania, could be utilized in addition to the Diebold "Express Delivery" family of products from **Diebold, Inc.** of Canton, Ohio. The currency dispenser 2048 is useful when transactions are being recorded which...

20/3,K/4 (Item 4 from file: 349)
DIALOG(R) File 349:PCT FULLTEXT
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00465487 **Image available**

AUTOMATED FILLING STATION WITH CHANGE DISPENSER STATION-SERVICE AUTOMATISEE AVEC DISTRIBUTEUR DE MONNAIE

Patent Applicant/Assignee:

GARY-WILLIAMS ENERGY CORPORATION,
KUROWSKI Michael,
BRUSKOTTER Thomas P,
SWAPP Edward M,

Inventor(s):

KUROWSKI Michael,
BRUSKOTTER Thomas P,
SWAPP Edward M,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9855952 A1 19981210
Application: WO 98US11160 19980603 (PCT/WO US9811160)
Priority Application: US 97868247 19970603; US 97946304 19971007

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM
GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX
NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW GH

GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES
FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD
TG

Publication Language: English

Fulltext Word Count: 9897

Fulltext Availability:

Detailed Description

Detailed Description

... and coins. The system 24 which may be, for example, a cash machine manufactured by **Diebold , Inc .** of Canton, Ohio, includes: a dispenser display 44 for displaying instructions, prompts, advertisements and the ...5 substantially integral alarm system 223. For example, the change dispenser 224 may be an **ATM** -type machine, such as that manufactured by **Diebold , Inc .**, having an integral security system (e.g., alarm systems) that includes integral camera surveillance, electronic...

?

22/3,K/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2005 Thomson Derwent. All rts. reserv.

015041746

WPI Acc No: 2003-102262/200309
Related WPI Acc No: 2003-119684; 2003-119686
XRPX Acc No: N03-081664

Electronic document signing method in bank, involves operating automated transaction machine to sign electronic document using private key corresponding to public key of digital certificate

Patent Assignee: DIEBOLD INC (DIEB-N)
Inventor: PARMELEE C L; SMITH M D
Number of Countries: 003 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20020129257	A1	20020912	US 2001273996	P	20010307	200309 B
			US 2001319015	P	20011129	
			US 2002683944	A	20020305	
ZA 200306191	A	20040929	ZA 20036191	A	20030811	200468
CN 1514978	A	20040721	CN 2002806620	A	20020306	200468

Priority Applications (No Type Date): US 2002683944 A 20020305; US 2001273996 P 20010307; US 2001319015 P 20011129

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20020129257	A1		35	H04L-009/00	Provisional application US 2001273996

Provisional application US 2001319015

ZA 200306191	A	93	G06F-000/00
CN 1514978	A		G06F-017/60

... automated transaction machine to sign electronic document using private key corresponding to public key of digital certificate
...Inventor: SMITH M D

Abstract (Basic):

... document to be digitally signed using a private key corresponding to public key of a digital certificate that is associated with account of the customer and customer number read from a card.

International Patent Class (Main): G06F-000/00 ...

... G06F-017/60

22/3,K/2 (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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01898382

System and method for adding value to a stored-value account
System und Verfahren zur Verwertung von Speicherwertkarte
Systeme et procede de valorisation de carte a valeur stockee

PATENT ASSIGNEE:

E2Interactive, Inc. D/B/A E2Interactive, Inc., (4401230), 250 Williams Street, Suite M-100, Atlanta, GA 30303, (US), (Applicant designated States: all)

INVENTOR:

Sylvia Keys

15-Jun-05 04:30 PM

Smith, Merrill Brooks , 250 Williams Street Suite M-100, Atlanta Georgia 30303, (US)

Graves, Philip Craig, 14 Statford Hall Place, Atlanta Georgia 30342, (US)
LEGAL REPRESENTATIVE:

Murgatroyd, Susan Elizabeth et al (55511), Baron & Warren, 19 South End, Kensington, London W8 5BU, (GB) .

PATENT (CC, No, Kind, Date): EP 1531416 A1 050518 (Basic)

APPLICATION (CC, No, Date): EP 2004256998 041111;

PRIORITY (CC, No, Date): US 519630 P 031114; US 739301 031219

DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IS; IT; LI; LU; MC; NL; PL; PT; RO; SE; SI; SK; TR

EXTENDED DESIGNATED STATES: AL; HR; LT; LV; MK; YU

INTERNATIONAL PATENT CLASS: G06F-017/60 ; G07F-007/02; G07F-019/00

ABSTRACT WORD COUNT: 192

NOTE:

Figure number on first page: 7

LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200520	1216
SPEC A	(English)	200520	12361
Total word count - document A			13577
Total word count - document B			0
Total word count - documents A + B			13577

INVENTOR:

Smith, Merrill Brooks ...

INTERNATIONAL PATENT CLASS: G06F-017/60 ...

...SPECIFICATION with the central system.

The indicia may comprise an article, such as magnetic stripe card, **smart card** , bar coded card, or any combination thereof. Either the magnetic stripe, chip or bar code...example) capable of receiving input from the central system, printing indicia or other information, performing **smart card** or magnetic stripe card reader or bar code scanner functions, and sending output to the...

...for receiving payment from the customer (i.e., through cash, or magnetic stripe card or **smart card** readers, for example), a communication portion for notifying the central system of the sale of...

22/3,K/3 (Item 2 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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01182366

Terminal configuration methods

Verfahren zur Konfiguration eines Endgerates

Methodes de configuration de terminal

PATENT ASSIGNEE:

DIEBOLD, INCORPORATED, (379921), 5995 Mayfair Road, North Canton, OH 44720, (US), (Applicant designated States: all)

INVENTOR:

Drummond, Jay Paul, 1965 Augusta Drive S.E., Massillon, Ohio 44646, (US)

Blackson, Dale, 5056 Paddington Down Street, Canton 44718 Ohio, (US)

Cichon, Bob A., 2112 Tennyson, Apt.6, Massillon. OH 44646, (US)

Moales, Mark A., P.O. Box 897, Grantham, NH 03753, (US)

Smith, Mark , 1910 Hunting Valley, NW North Canton 44720 Ohio, (US)

Ess, Joseph C., 220 Wilbur Drive NE #10, North Canton 44720 Ohio, (US)
Weis, David W., 842 McKinley Boulevard, Ashland 44805 Ohio, (US)
Church James, 741 Governor's Circle, Kent 44240 Ohio, (US)

LEGAL REPRESENTATIVE:

Boden, Keith McMurray et al (83222), D. Young & Co. 21 New Fetter Lane,
London EC4A 1DA, (GB)

PATENT (CC, No, Kind, Date): EP 1030275 A2 000823 (Basic)
EP 1030275 A3 040630

APPLICATION (CC, No, Date): EP 99303396 990430;

PRIORITY (CC, No, Date): US 77337 980527; US 91887 P 980707; US 95626 P
980807; US 98907 P 980902; US 193564 981117

DESIGNATED STATES: DE; ES; FR; GB; IT

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: G07F-019/00; **G06F-009/44**

ABSTRACT WORD COUNT: 227

NOTE:

Figure number on first page: 2

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200034	792
SPEC A	(English)	200034	33415
Total word count - document A			34207
Total word count - document B			0
Total word count - documents A + B			34207

INVENTOR:

... US)

Smith, Mark ...

...INTERNATIONAL PATENT CLASS: **G06F-009/44**

...SPECIFICATION encoding other readable indicia on the card.

Alternatively, if the customer's card is a " smart " card which includes semiconductor storage thereon, the URL address associated with the customer may be included...transactions and enables directing messages related to tracking use (such as for electronic purse type smart cards) or for settlement of various transaction types to a selected system address.

It will be...

22/3,K/4 (Item 3 from file: 348)

DIALOG(R)File 348:EUROPEAN PATENTS

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01093847

Automated banking machine with accessing data based on customer inputs including biometric customer identification and producing selected displays based on customer identity (profile bean)

Automatischer Geldautomat mit Zugriff auf Daten basierend auf Gebrauchereingaben mit unter anderem biometrischer Gebrauchersidentifikation und Herstellung vorbestimmter Bildanzeigen basierend auf Gebraucheridentitat (Profil Bean)

Guichet automatique bancaire pouvant acceder a des informations en se basant sur des donnees sur l'utilisateur comprenant des donnees biometriques d'identification de l'utilisateur et produisant des affichages specifiques bases sur l'identite de l'utilisateur (bean de profile)

PATENT ASSIGNEE:

Sylvia Keys

15-Jun-05 04:30 PM

DIEBOLD, INCORPORATED, (379921), 5995 Mayfair Road, North Canton, OH
44720, (US), (Applicant designated States: all)

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Blackson, Dale, 5056 Paddington Down Street, Canton, Ohio 44718, (US)
Cichon Bob A., 2112 Tennyson N.E.#6, Massillon Ohio 44646, (US)
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Moales, Mark A., 5162 Bundoran Street, North Canton, Ohio 44720, (US)
Smith, Mark D., 1910 Hunting Valley, NW North Canton, Ohio 44720, (US)
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Weis, David W., 842 McKinley Boulevard, Ashland, Ohio 44805, (US)
Church, James, 741 Governor's Circle, Kent, Ohio 44240, (US)

LEGAL REPRESENTATIVE:

Boden, Keith McMurray et al (83222), D. Young & Co. 21 New Fetter Lane,
London EC4A 1DA, (GB)

PATENT (CC, No, Kind, Date): EP 961251 A2 991201 (Basic)
EP 961251 A3 040630

APPLICATION (CC, No, Date): EP 99303413 990430;

PRIORITY (CC, No, Date): US 77337 980527; US 91887 P 980707; US 95626 P
980807; US 98907 P 980902; US 193623 981117

DESIGNATED STATES: DE; ES; FR; GB; IT

EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI

INTERNATIONAL PATENT CLASS: **G06F-009/46** ; **G06F-009/445** ; H04L-012/24;
G06F-009/44 ; G07F-009/02; G07F-005/18; H04L-029/06; **G06F-017/30**

ABSTRACT WORD COUNT: 227

NOTE:

Figure number on first page: 3

LANGUAGE (Publication, Procedural, Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9948	934
SPEC A	(English)	9948	33418
Total word count - document A			34352
Total word count - document B			0
Total word count - documents A + B			34352

INVENTOR:

... US)

Smith, Mark D ...

INTERNATIONAL PATENT CLASS: **G06F-009/46** ...

... **G06F-009/445** ...

... **G06F-009/44** ...

... **G06F-017/30**

... SPECIFICATION encoding other readable indicia on the card.

Alternatively, if the customer's card is a " **smart** " card which includes semiconductor storage thereon, the URL address associated with the customer may be included... transactions and enables directing messages related to tracking use (such as for electronic purse type **smart cards**) or for settlement of various transaction types to a selected system address.

It will be...

22/3,K/5 (Item 1 from file: 349)
DIALOG(R) File 349:PCT FULLTEXT

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01164104 **Image available**

METHODS AND APPARATUS FOR FACILITATING A TRANSACTION

PROCEDES ET APPAREIL PERMETTANT DE FACILITER UNE TRANSACTION

Patent Applicant/Assignee:

GE CAPITAL FINANCIAL INC, 4246 South Riverboat Road, Salt Lake City, UT
84123, US, US (Residence), US (Nationality), (For all designated states
except: US)

Patent Applicant/Inventor:

SMITH Michael S, 10101 Wasatch Boulevard, Sandy, UT 84092, US, US
(Residence), US (Nationality), (Designated only for: US

Legal Representative:

HAYDEN Scott (et al) (agent), General Electric Company, 3135 Easton
Turnpike (W3C), Fairfield, CT 06828, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200486171 A2 20041007 (WO 0486171)

Application: WO 2004US6657 20040305 (PCT/WO US04006657)

Priority Application: US 2003391689 20030319

Designated States:

(All protection types applied unless otherwise stated - for applications
2004+)

AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM
DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC
LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO
RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PL PT RO
SE SI SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) BW GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 10785

Patent Applicant/Inventor:

SMITH Michael S ...

Main International Patent Class: **G06F**

Fulltext Availability:

Detailed Description

Detailed Description

... pool as, sociated with the identified facilitator (e.g., the identity
may be validated using **digital certificates** and/or other
cryptographic techniques). Each issuer may maintain a number of different
card pools...

22/3,K/6 (Item 2 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00997831 **Image available**

SYSTEM AND METHOD FOR SUPPLYING COMMUNICATION SERVICE

SYSTEME ET PROCEDE PERMETTANT DE FOURNIR UN SERVICE DE COMMUNICATION

Patent Applicant/Assignee:

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200327805 A2-A3 20030403 (WO 0327805)
Application: WO 2002US30281 20020924 (PCT/WO US02030281)
Priority Application: US 2001324333 20010924; US 2002396404 20020715

Designated States:

(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI
SK SL TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LU MC NL PT SE SK TR
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 9369

Inventor(s):

... SMITH Merrill Brooks

Main International Patent Class: G06F-017/60

Fulltext Availability:

Detailed Description

Claims

Detailed Description

... with the central system.

The indicia may comprise an article, such as magnetic stripe card, **smart**

card , bar coded card, or any combination thereof Either the magnetic
stripe, chip or bar code...example) capable of receiving input from the
central system, printing indicia or other information, performing **smart**
card or magnetic stripe card reader or bar code scanner functions, and
sending output to the...for receiving payment from the customer (i.e.,
through cash, or magnetic stripe card or **smart card** readers, for
example), a communication portion for notifying the central system of the
sale of...

Claim

... a magnetic strip card.

4 The method of claim 2, wherein the article is a **smart card** .

5 The method of claim 2, wherein the article is a card ha ving a...

22/3,K/7 (Item 3 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00979156 **Image available**

PROTECTING SOFTWARE APPLICATIONS AGAINST SOFTWARE PIRACY

PROTECTION D'APPLICATIONS LOGICIELLES CONTRE LE PIRATAGE DE LOGICIELS

Patent Applicant/Assignee:

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Inventor(s):

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Legal Representative:

WAKIMURA Mary Lou (et al) (agent), Hamilton, Brook, Smith & Reynolds,
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Patent and Priority Information (Country, Number, Date):

Patent: WO 200309114 A2-A3 20030130 (WO 0309114)
Application: WO 2002US22694 20020717 (PCT/WO US0222694)
Priority Application: US 2001306088 20010717

Designated States:

(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI
SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW
(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LU MC NL PT SE SK TR
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 15177

Inventor(s):

SMITH Michael D ...

Main International Patent Class: G06F-001/00

Fulltext Availability:

Detailed Description

Detailed Description

... unique values associated with a piece of hardware (e.g., a processor,
disk, dongle, or **smart card**) and a secret passphrase known only to
the authorized user associated with said hardware. Effective...

22/3,K/8 (Item 4 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00943767 **Image available**

**SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR A SUPPLY CHAIN MANAGEMENT
SYSTEME, PROCEDE ET PRODUIT PROGRAMME INFORMATIQUE CONCUS POUR UNE GESTION
DE CHAINE D'APPROVISIONNEMENT**

Patent Applicant/Assignee:

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33134-5202, US, US (Residence), US (Nationality), (For all designated
states except: US)

Patent Applicant/Inventor:

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BURK Michael James, Restaurant Services, Inc., Two Alhambra Plaza, Suite
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(Designated only for: US)

MENNINGER Anthony Frank, Restaurant Services, Inc., Two Alhambra Plaza,
Suite 500, Coral Gables, FL 33134-5202, US, US (Residence), US

But some may support additional authentication types, such as
bionietrics, **digital certificates** , tokens or **smart cards** .

Authentication Method - The method differs from the type by representing
the underlying authentication architecture. How...Company-Wide
Architecture and Processes

0 Define Technical Security Infrastructure (Single Sign-On,
Intrusion Detection, **Digital Certificates** , VPN, etc)
Provide Technical Consulting to Businesses
Assist Business to Resolve Business Specific Security Issues...

22/3,K/9 (Item 5 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00939218 **Image available**

AUTOMATED TRANSACTION MACHINE DIGITAL SIGNATURE SYSTEM AND METHOD
SYSTEME ET PROCEDE DE SIGNATURE NUMERIQUE PAR MACHINE DE TRANSACTION
AUTOMATIQUE

Patent Applicant/Assignee:

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Inventor(s):

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Legal Representative:

JOCKE Ralph E (agent), 231 South Broadway, Medina, OH 44256, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200273341 A2-A3 20020919 (WO 0273341)

Application: WO 2002US6826 20020306 (PCT/WO US0206826)

Priority Application: US 2001273996 20010307; US 2001319015 20011129

Designated States:

(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)

BR CA CN CO IN MX PL RU ZA

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

Publication Language: English

Filing Language: English

Fulltext Word Count: 20881

Inventor(s):

... **SMITH Mark D**

Main International Patent Class: **G06F-017/60**

Fulltext Availability:

Detailed Description

Claims

Detailed Description

... electronic document and digital signature.

Such public keys are often distributed as part of a **digital certificate** which is digitally signed by a trusted third party
certificate authori ty.

Although the **digital certificate** and public key may be publicly
disclosed to the world, the private key must remain...CompactFlash and
Sony Memory Stickg; PC Cards Interfaces; CD drives,
DVD drives; Mini-CD drives; **smart cards** ; floppy disk drives; and
digital tape drives.

with the one digital safe deposit account to be attached to the electronic document...

...The apparatus according to claim 94 wherein the computer processor is operative to cause a **digital certificate** to be generated and stored in association with the new digital safe deposit account, wherein...financial account number.

105. The method according to claim 103, further comprising:

d) accessing a **digital certificate** previously associated with the financial account number, wherein the **digital certificate** includes a public key that corresponds to the private key, wherein the public key is capable of being used to validate the digital signature; and

e) enabling the **digital certificate** to be associated with the electronic document.

106. The method according to claim 103, further...

...cash from the ATM.

116. A method comprising:

a) producing a plurality of **digital certificates** for a plurality of individual customers, wherein each individual customer is associated with an account;

b) associating the accounts of the individual customers with the corresponding **digital certificates** of the individual customers;

c) producing at least one card for each of the individual...

...19. The method according to claim 116, wherein in step (a) each **digital certificate** includes a public key that corresponds to a private key, wherein in step (c) the...

...digitally signed responsive to the private key that corresponds to the public key of the **digital certificate** which is associated with the account of the individual customer using the machine.

120. The...

22/3,K/10 (Item 6 from file: 349)
 DIALOG(R)File 349:PCT FULLTEXT
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00893471 **Image available**
AUTOMATED TRANSACTION MACHINE WITH SHEET ACCUMULATOR AND PRESENTER MECHANISM
MACHINE POUR TRANSACTIONS, AUTOMATISEES A ACCUMULATEUR DE FEUILLES ET MECANISME DE PRESENTATION

Patent Applicant/Assignee:
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 MILLER Robert G, 2941 Bonnebrook, Bath, OH 44333, US,
SMITH Mark D, 1910 Hunting Valley N.W., North Canton, Oh 44720, US,
 RAMACHANDRAN Natarajan, 2424 Lyndon Drive, Uniontown, OH 44685, US

Legal Representative:
 JOCKE Ralph (agent), 231 South Broadway, Medina, OH 44256, US,
 Patent and Priority Information (Country, Number, Date):
 Patent: WO 200227626 A1 20020404 (WO 0227626)

Application: WO 2001US30805 20010927 (PCT/WO US0130805)
Priority Application: US 2000236489 20000929
Designated States:
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BR CA CN CO IN JP MX PL RU ZA
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
Publication Language: English
Filing Language: English
Fulltext Word Count: 37107

Inventor(s):

... SMITH Mark D
Main International Patent Class: G06F-017/60
Fulltext Availability:
Detailed Description

Detailed Description

... Increasingly self service machines are being provided with the capability of accepting a user's **smart card**. **Smart cards** include a memory thereon which has data representative of monetary value. Instead of assessing a...

...monetary value from the value represented by data in the memory of the user's **smart**

card. Cash receiving and dispensing capability has generally not been provided machines such as those described...provided by interaction of the

controller with a replaceable plug-in memory such as a **smart card**. Various

forms of user interfaces may also be provided to simplify and facilitate operation of...Cards 18 may be various types of cards such as credit cards, debit cards or **smart cards** which include information for identifying the user and/or their accounts.

User interface 14 of...cards may also be employed with the machine. Such cards include varieties of so called "**smart**

cards" which include a programmable memory with data thereon. Such data may include information about the...

...date. hi one

exemplary embodiment the plug-in memory 38 may be supported on a **smart card**. The plug-in memory 38 may include one or more promotional items which are...in the plug-in memory 38 which in the described exemplary embodiment is a **smart card**, includes a promotional message as well as time parameters associated with the promotional message. Thus...

...Because the exemplary embodiment enables the presentation of promotional messages selectively by simply plugging a **smart card** into an associated connector 36, the promotional messages may be changed readily and inexpensively from...

...For example the merchandising establishment or entities sponsoring promotional events may provide promotional messages on **smart cards** to operators of the machine 10.

The operators of the machines 10 may plug...

...understood that while in the exemplary embodiment the plug-in memory 3 8 includes a **smart card**, other embodiments may include other types of memory devices. These may include for example floppy... regarding transaction on a card or other object. Such transaction data may be stored for example on a magnetic stripe card or in memory on a **smart card**.

Alternatively merchant users may have contactless cards or tokens which are electronically or magnetically programmable...be understood that embodiments may read various types of cards such as magnetic stripe cards, **smart cards**, cards with optical or other types of indicia. Output devices in the exemplary user interface...

22/3,K/11 (Item 7 from file: 349)
DIALOG(R) File 349:PCT FULLTEXT
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00857195 **Image available**

AUTOMATED TRANSACTION MACHINE SYSTEM AND METHOD
SYSTEME ET PROCEDE POUR MACHINE TRANSACTIONNELLE AUTOMATIQUE

Patent Applicant/Assignee:

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USNER Robert, 121 Grande Dr., Morrisville, NC 27560, US,
DRUMMOND Jay Paul, 1965 Augusta Drive, S.E., Massillon, OH 44646, US,
SMITH Mark D, 1910 Hunting Valley N.W., North Canton, OH 44720, US

Legal Representative:

JOCKE Ralph (agent), 231 South Broadway, Medina, OH 44256, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200190850 A2-A3 20011129 (WO 0190850)
Application: WO 2001US16775 20010523 (PCT/WO US0116775)
Priority Application: US 2000207043 20000525

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

BR CA CN CO IN MX PL RU ZA

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

Publication Language: English

Filing Language: English

Fulltext Word Count: 7253

Inventor(s):

... **SMITH Mark D**

Main International Patent Class: G06F-017/60

Fulltext Availability:

Detailed Description

Detailed Description

... in operative connection with the ATM such as a floppy disk, CD, magnetic stripe card, **smart card**, or any other portable medium that the diagnostic interface is operative to access through the...

...embodiment of the authentication system, the diagnostic interfaces 40 may include a secret password or **digital certificate** which may be used by the diagnostic interface to determine if an application is allowed...

...interface may then authenticate the digital signature associated with the communication using one or more **digital certificates** and/or public keys stored in operative connection with the diagnostic interface. When the digital...

...In a further exemplary embodiment, the diagnostic application may be required to send a valid **digital certificate** to the diagnostic interface prior to being granted access to the transaction function device. The **digital certificate** may be validated by the diagnostic interface using a trusted public key of a certificate authority that issued the **digital certificate**. The **digital certificate** may also be evaluated by the diagnostic interface to determine if it has expired. When the **digital certificate** has expired or is otherwise invalid, the

I 0 exemplary embodiment of the diagnostic interface...

...be operatively programmed to return a message to the calling application which indicates that the **digital certificate** is not valid and access to the transaction function device is denied. In further exemplary...

22/3,K/12 (Item 8 from file: 349)

DIALOG(R) File 349:PCT FULLTEXT

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00853837 **Image available**

**WIRELESS ELECTRONIC PRESCRIPTION SCANNING AND MANAGEMENT SYSTEM
SYSTEME DE GESTION ET DE LECTURE D'ORDONNANCES ELECTRONIQUE SANS FIL**

Patent Applicant/Assignee:

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200186574 A2-A3 20011115 (WO 0186574)
Application: WO 2001US13981 20010501 (PCT/WO US0113981)
Priority Application: US 2000562386 20000501

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS
LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ
TM TR TT TZ UA UG UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English
Filing Language: English
Fulltext Word Count: 24311

Inventor(s):

... **SMITH Martin**

Main International Patent Class: **G06F-019/00**

Fulltext Availability:

Detailed Description

Detailed Description

... identify and authenticate the provider.

Other means of identification and authentication include the use of "**smart cards**" or biometric samples, both of which are well known in the art. Methods for making **smart cards** are described in U.S. Patent No. 5,955,021 and references therein. A typical method for using **smart cards** is described in U.S. Patent No. 5,983,273, and biometric sample (also known...

22/3,K/13 (Item 9 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00824093 **Image available**

SYSTEM AND METHOD FOR DISPENSING DIGITAL INFORMATION FROM AN AUTOMATED TRANSACTION MACHINE

SYSTEME ET PROCEDE DE DISTRIBUTION D'INFORMATIONS NUMERIQUES A PARTIR D'UN SYSTEME DE TRANSACTION AUTOMATISE

Patent Applicant/Assignee:

DIEBOLD INCORPORATED, 5995 Mayfair Road, North Canton, OH 44720, US, US
(Residence), US (Nationality)

Inventor(s):

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SMITH Mark D, 1910 Hunting Valley N.W., North Canton, OH 44720, US,
RAMACHANDRAN Natarajan, 2424 Lyndon Drive, Uniontown, OH 44685, US

Legal Representative:

JOCKE Ralph (agent), 231 South Broadway, Medina, OH 44256, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200157617 A2-A3 20010809 (WO 0157617)

Application: WO 2001US3597 20010202 (PCT/WO US01003597)

Priority Application: US 2000180490 20000205; US 2000250269 20001130

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

BR CA CN IN MX PL RU ZA

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

Publication Language: English

Filing Language: English

Fulltext Word Count: 10738

Inventor(s):

... **SMITH Mark D**

Main International Patent Class: **G06F-017/60**

Fulltext Availability:

Detailed Description

Detailed Description

... is in operative connection with storage read/write devices such as a floppy disk drive, **smart card** drive, flash memory drive, or any other device that is operative to read and write...to charge the fee to an account associated with a credit card, debit card, or **smart card** for example. For ATMs that include a currency accepting device, the ATM may be operative...may be a bank card, credit card, 1 5 debit card, gas card, merchant card, **smart card**, or other medium that is operative to store account data and/or other information which...some embodiments of the present invention include credit cards, bank cards, debit cards, merchant cards, **smart cards**, or any other portable medium that can store account or user information and/or data... in one or more data stores. This credit information may be stored locally on a **smart card** or other item, at the ATM or remotely in a computer such as a financial...

...The portable sound player would only be operative to play the sound file if the **digital certificate** corresponds to a unique code or certificate associated with the portable sound player. Also the...

22/3,K/14 (Item 10 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00736212 **Image available**

METHOD AND SYSTEM FOR CONNECTING SERVICES TO AN AUTOMATED TRANSACTION MACHINE

PROCEDE ET SYSTEME POUR L'ETABLISSEMENT DE CONNEXIONS DE SERVICES DE TRANSACTION AVEC UNE MACHINE DE TRANSACTION AUTOMATIQUE

Patent Applicant/Assignee:

DIEBOLD INCORPORATED, 5995 Mayfair Road, North Canton, OH 44720, US, US
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Patent Applicant/Inventor:

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Legal Representative:

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Patent and Priority Information (Country, Number, Date):

Patent: WO 200049547 A1 20000824 (WO 0049547)

Application: WO 2000US4130 20000216 (PCT/WO US0004130)

Priority Application: US 99120506 19990217; US 99133579 19990511

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AU BR CA CN CZ HR HU ID IL IN IS JP KE KR LK LT MX NO NZ PL RU SE SG SI
SK TR US VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
Publication Language: English
Filing Language: English
Fulltext Word Count: 23748

Patent Applicant/Inventor:
... Designated only for: US)

SMITH Mark D ...

Main International Patent Class: **G06F-017/60**

Fulltext Availability:

Detailed Description

Claims

Detailed Description

... bill; and card readers are improved so they can work with magnetic stripe cards and **smart cards**.

As long as the basic functionality of a new device is the same as a...a personal ATM.

It is a further object of the present invention to provide a **smart card** operated as a personal ATM.

It is a further object of the present invention to...any small portable computing device such as a notebook computer, cell phone, PDA, pager, or **smart card**. The personal nature of this embodiment allows an individual to store a plurality of their... information stored in personal ATMs.

Figure 15 schematically represents a personal ATM on a **smart card** that is operative to use the input and output devices of a notebook computer to...

...with services of a host ATM.

Figure 19 schematically represents a personal ATM on a **smart card** that is operative to perform banking transactions with services of a host ATM.

Figure 20...

...first activated.

Figure 21 schematically represents the process of using a personal ATM on a **smart card** when the personal ATM is first activated.

Figure 22 schematically represents the process of withdrawing...as an attached PC card modem, and a card reader service 512 such as a **smart card** reader. The printer service can be used to print banking transaction receipts or even full...

...purchases of goods or services. The card reader service 512 can provide access to a **smart card** for storing electronic money, or 15 to read the account information from a...

...displays and input devices. However, the present invention also encompasses other computing devices such as **smart cards** which do not have displays and input

Transfer Amount Menu
 Usinj...
 ...Account
 Bank B Checking Account 940
 Bank C Savings Account
 Money Market
 e-money on **smart card** (local Device)
 e-money on **smart card** (Host ATM: Bank 2)
 e-money local (encrypted storage)
 Select Item
 U
 Withdrawal Amount Menu...
 ...Menu
 Bank B Checking Account
 Bank C Savings Account 950
 Money Market
 e-money on **smart card** (local Device)
 e-money on **smart card** (Host ATM: Bank 2)
 e-money local (encrypted storage)
 Select Item
 13
 Deposot FromMenu
 952...Checking Account
 Bank C Savings Account -@@962
 Bank D Debit Card Account
 e-money on **smart card** (local Device)
 e-money local (encrypted storage)
 Select Item
 a
 Payment Validation Menu
 Pay \$150...
 ...B Checking Account
 Bank C Savings Account
 Bank D Debit Card Account
 e-money on **smart card** (local Device)
 e-money on **smart card** (MD Pan-nacy X)
 e-money local (encrypted storage)
 Select Item
 Validate Payment Menn
 -- 976...

22/3,K/15 (Item 11 from file: 349)
 DIALOG(R)File 349:PCT FULLTEXT
 (c) 2005 WIPO/Univentio. All rts. reserv.

00568297 **Image available**
AUTOMATED TRANSACTION MACHINE
MACHINE DE TRANSACTION AUTOMATIQUE
 Patent Applicant/Assignee:
 DIEBOLD INCORPORATED,
 Inventor(s):
 OWENS Mark,
 SMITH Mark D ,
 HANEY Sean,
 JUNKINS Andrew,
 FORCE Mathew,
 GRAEF H Thomas,

HERRERA Elizabeth,
MILLER Robert G
Patent and Priority Information (Country, Number, Date):
Patent: WO 200031670 A1 20000602 (WO 0031670)
Application: WO 99US27194 19991115 (PCT/WO US9927194)
Priority Application: US 98109590 19981123; US 99313480 19990517; US
99313025 19990517; US 99313020 19990517; US 99313023 19990517; US
99313024 19990517; US 99313021 19990517
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
BR CA CN IN MX PL RU ZA AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL
PT SE
Publication Language: English
Fulltext Word Count: 26458

Inventor(s):
... SMITH Mark D
Main International Patent Class: G06F-017/60
Fulltext Availability:
Detailed Description

Detailed Description

... Increasingly self service machines are being provided with the
capability of accepting a user's
smart card . **Smart cards** include a memory thereon which has data
representative of monetary value. Instead of assessing a...
...monetary value from the value represented by data in the memory of the
user's **smart card** .
Cash receiving and dispensing capability has generally not been
provided in most self service and...are provided by interaction of the
controller with a replaceable plug-in memory of a **smart card** or
similar device. Various forms of user interfaces may also be provided to
simplify and...types of cards may also be employed with the machine. Such
cards include so called "**smart**
cards" which include a programmable memory with data thereon. Such data
may include information about the...date. In one
preferred embodiment the plug in memory 38 may be supported on a **smart**
card . The memory may include one or more promotional items which are
promoted only during certain...in the plug in memory which in the
described form of the invention is a **smart card** , includes a
promotional message as well
as time parameters associated with the promotional message. Thus...
...form of the invention enables the presentation
of promotional messages selectively by simply plugging a **smart card**
into an associated connector, the promotional messages may be changed
readily from
outside the machine...
...For example the merchandising
establishment or entities sponsoring promotional events may provide
promotional messages on **smart cards** to operators of the machine. The
operators of the machines may plug the cards into...
...be understood that while in the exemplary embodiment the
plug in memory element includes a **smart card** , other embodiments may
include other types of plug in memory devices. These may include for...

22/3,K/16 (Item 12 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
(c) 2005 WIPO/Univentio. All rts. reserv.

00433577 **Image available**

AUTOMATED BANKING MACHINE APPARATUS AND SYSTEM
APPAREIL ET SYSTEME DE GUICHET AUTOMATIQUE BANCAIRE

Patent Applicant/Assignee:

INTERBOLD,
DIEBOLD INCORPORATED,
DRUMMOND Jay Paul,
BLACKSON Dale,
CHEN Lilei,
CICHON Bob A,
COVERT Mark S,
LEPPER Bradrick Q,
MOALES Mark A,
SMITH Mark D,
LEMLEY Robert J,
CALIFF Michael E Jr,
JOYCE Shawn D,
MOORE Phillip S,
SWINGLER Steven C,

Inventor(s):

DRUMMOND Jay Paul,
BLACKSON Dale,
CHEN Lilei,
CICHON Bob A,
COVERT Mark S,
LEPPER Bradrick Q,
MOALES Mark A,
SMITH Mark D ,
LEMLEY Robert J,
CALIFF Michael E Jr,
JOYCE Shawn D,
MOORE Phillip S,
SWINGLER Steven C

Patent and Priority Information (Country, Number, Date):

Patent: WO 9824041 A1 19980604
Application: WO 97US21422 19971125 (PCT/WO US9721422)
Priority Application: US 9631956 19961127

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

BR CA CN MX RU US AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Publication Language: English

Fulltext Word Count: 11549

Inventor(s):

... **SMITH Mark D**

Main International Patent Class: **G06F-017/60**

Fulltext Availability:

Detailed Description

Detailed Description

... encoding other readable indicia on the card.

Alternatively, if the customer's card is a " smart " card which includes semiconductor storage thereon, the URL address associated with the customer may be included...

File 16:Gale Group PROMT(R) 1990-2005/Jun 16
(c) 2005 The Gale Group
File 148:Gale Group Trade & Industry DB 1976-2005/Jun 16
(c)2005 The Gale Group
File 160:Gale Group PROMT(R) 1972-1989
(c) 1999 The Gale Group
File 275:Gale Group Computer DB(TM) 1983-2005/Jun 16
(c) 2005 The Gale Group
File 621:Gale Group New Prod.Annou.(R) 1985-2005/Jun 16
(c) 2005 The Gale Group
File 636:Gale Group Newsletter DB(TM) 1987-2005/Jun 16
(c) 2005 The Gale Group
File 9:Business & Industry(R) Jul/1994-2005/Jun 16
(c) 2005 The Gale Group
File 15:ABI/Inform(R) 1971-2005/Jun 15
(c) 2005 ProQuest Info&Learning
File 20:Dialog Global Reporter 1997-2005/Jun 16
(c) 2005 The Dialog Corp.
File 95:TEME-Technology & Management 1989-2005/May W2
(c) 2005 FIZ TECHNIK
File 476:Financial Times Fulltext 1982-2005/Jun 16
(c) 2005 Financial Times Ltd
File 610:Business Wire 1999-2005/Jun 16
(c) 2005 Business Wire.
File 613:PR Newswire 1999-2005/Jun 16
(c) 2005 PR Newswire Association Inc
File 624:McGraw-Hill Publications 1985-2005/Jun 15
(c) 2005 McGraw-Hill Co. Inc
File 634:San Jose Mercury Jun 1985-2005/Jun 15
(c) 2005 San Jose Mercury News
File 810:Business Wire 1986-1999/Feb 28
(c) 1999 Business Wire
File 813:PR Newswire 1987-1999/Apr 30
(c) 1999 PR Newswire Association Inc
File 88:Gale Group Business A.R.T.S. 1976-2005/Jun 16
(c) 2005 The Gale Group
File 647:CMP Computer Fulltext 1988-2005/May W5
(c) 2005 CMP Media, LLC
File 674:Computer News Fulltext 1989-2005/Jun W2
(c) 2005 IDG Communications
File 696:DIALOG Telecom. Newsletters 1995-2005/Jun 15
(c) 2005 The Dialog Corp.
File 369:New Scientist 1994-2005/Apr W4
(c) 2005 Reed Business Information Ltd.
File 484:Periodical Abs Plustext 1986-2005/Jun W2
(c) 2005 ProQuest
File 370:Science 1996-1999/Jul W3
(c) 1999 AAAS
File 553:Wilson Bus. Abs. FullText 1982-2004/Dec
(c) 2005 The HW Wilson Co

Set	Items	Description
S1	195259	SMARTCARD? OR (SMART OR CHIP) () (CARD OR CARDS)
S2	57907	DIGITAL () (CERTIFICATE? OR TOKEN OR TOKENS) OR CHIPCARD? OR ELECTRONIC () APPLIANCE?
S3	468715	ATM OR AUTOMATIC () TELLER () MACHINE?
S4	384748	(BANKING () MACHINE? OR (TELLER? OR TRANSACTION? OR ELECTRONIC?) (2N) (MACHINE? OR DEVICE? OR APPARATUS?) OR CONSUMER () TRANSACTION () FACILIT? OR AUTOMATIC () DEPOSIT () PAYMENT () MACHINE?)
S5	52310	(DIGITAL OR CRYPTOGRAPH? OR ENCODE?) () (SIGNATURE? OR SIGNING)

S6	4949	(PRIVATE OR PERSONAL OR SECRET) () (KEYS OR KEYS)
S7	8762	DIEBOLD() INC?
S8	9947	AU=(PARMELEE, C? OR PERMELEE C? OR SMITH, M? OR SMITH M?)
S9	242361	S1 OR S2
S10	789516	S3 OR S4
S11	55392	S5 OR S6
S12	254	S9(S)S10(S)S11
S13	7090	S9(10N)S10
S14	43	S13(10N)S11
S15	37	S14 NOT PY>2001
S16	19	RD (unique items)
S17	254	S2(S)S3
S18	30	S17(S) (S5 OR S6)
S19	28	S18 NOT S16
S20	22	S19 NOT PY>2001
S21	13	RD (unique items)
S22	718	S7(3N) (S9 OR S10 OR S11)
S23	0	S22(S)S6
S24	1	S22(S)S5
S25	0	S8(S) (S9 OR S10 OR S11)

16/3,K/1 (Item 1 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2005 The Gale Group. All rts. reserv.

08624946 Supplier Number: 74482900 (USE FORMAT 7 FOR FULLTEXT)
Star and Concord Catch EFT Merger Wave. (Company Business and Marketing)
Marlin, Steven
Bank Systems + Technology, v38, n4, p8
April, 2001
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 803

... re strongly pursuing," Congemi said. When a customer wishes to make a Web purchase, a **digital signature** --generated by bank-provided **chip cards** or software--is transmitted along with the customer's **ATM card** number to the merchant processor. The **digital signature** is validated using the customer's public key, which is kept on file by Star...

16/3,K/2 (Item 2 from file: 16)
DIALOG(R)File 16:Gale Group .PROMT(R)
(c) 2005 The Gale Group. All rts. reserv.

08323275 Supplier Number: 70368995 (USE FORMAT 7 FOR FULLTEXT)
After An Election Debacle In Florida, Execs Tout A Chadless ATM Solution.
ATM & Debit News, v1, n12, p1
Jan 18, 2001
Language: English Record Type: Fulltext
Document Type: Newsletter; Trade
Word Count: 678

... real-time reporting of votes.
EMMA will support the use of passwords, personal identification numbers, **digital certificates**, **digital signatures**, and biometrics to identify voters. The **ATM** also will be able to display candidates' photographs and biographic information. All aspects of the...

16/3,K/3 (Item 3 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2005 The Gale Group. All rts. reserv.

08311832 Supplier Number: 69698271 (USE FORMAT 7 FOR FULLTEXT)
ATMs Get a Boost From the Election Snafu.
Credit Card Management, v13, n10, p8
Jan, 2001
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 551

... any central election data center.
EMMA will support the use of passwords, personal identification numbers, **digital certificates**, **digital signatures**, and biometrics to identify voters. The **ATM** also will be able to display candidates' photographs and information about the candidates. All aspects...

16/3,K/4 (Item 4 from file: 16)

DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2005 The Gale Group. All rts. reserv.

07710630 Supplier Number: 63801737 (USE FORMAT 7 FOR FULLTEXT)
Former HP Executive to Lead Gemplus. (Company Operations)
Demers, Marie Eve
Electronic News (1991), v46, n30, p62
July 24, 2000
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 451

... In fact, we will soon be making an announcement about a major agreement to include **smart cards** into multi-application cards: credit, **ATM**, loyalty cards that could include **digital signatures** or even fingerprint reading."

Cards for GPS and third-generation wireless cell phone products will ...

16/3,K/5 (Item 5 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2005 The Gale Group. All rts. reserv.

07566215 Supplier Number: 63397267 (USE FORMAT 7 FOR FULLTEXT)
The Changing Face of ATM Networks.
O'Brien, Jeanne
Bank Systems + Technology, v37, n7, p38
July, 2000
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 2453

... are very high."

Another regional EFT network Internet debit solution being tested is Internet Secure **ATM** Payments (ISAP). The system would require consumers to use a **smart card** and a reader, linked to their PC, to generate a **digital signature**, which would authorize an Internet purchase with their ATM card. Participants in the effort at...

16/3,K/6 (Item 6 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2005 The Gale Group. All rts. reserv.

07120428 Supplier Number: 60059783 (USE FORMAT 7 FOR FULLTEXT)
E-Payment Choices. (Industry Trend or Event)
Redman, Russell; Kiesnoski, Kenneth
Bank Systems + Technology, v37, n3, p8
March, 2000
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 1322

... Maestro (Mastercard) -- plus Citigroup and the National Automated Clearing House Association (NACHA). Called Internet Secure **ATM** Payments (ISAP), the solution would require consumers to use a **smart card** and a reader; linked to their PC, to generate a **digital signature**, which would authorize an online purchase with their ATM card.

"Instead of using their PIN...

16/3,K/7 (Item 7 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2005 The Gale Group. All rts. reserv.

06873122 Supplier Number: 58179772 (USE FORMAT 7 FOR FULLTEXT)
NYCE Offers Solution for Debit Use on the Web.
Stock, Helen
American Banker, v164, n237, p13
Dec 13, 1999
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 988

... introduction this year of the Blue card.
Another way of authenticating customers, with or without **smart cards**, is **digital signature** and certificate technology. The **ATM** network Star Systems, Citibank, and several others joined a National Automated Clearing House Association project...

16/3,K/8 (Item 8 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2005 The Gale Group. All rts. reserv.

06606995 Supplier Number: 55635943 (USE FORMAT 7 FOR FULLTEXT)
Authentication Firm May Get Lift from Entrust and Ingram Micro Deals. (Brief Article)
Kutler, Jeffrey
American Banker, v164, n168, p10
Sept 1, 1999
Language: English Record Type: Fulltext
Article Type: Brief Article
Document Type: Magazine/Journal; Trade
Word Count: 388

... a full-fledged public key infrastructure with digital credentials. Activcard sells the package as an "**ATM** -like process" with **smart card** readers. Entry of a personal identification number generates a **digital signature** for secure network access.

Activcard Inc. president Tom Arthur said that the Activcard-Entrust is...

16/3,K/9 (Item 9 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2005 The Gale Group. All rts. reserv.

05942091 Supplier Number: 53195618 (USE FORMAT 7 FOR FULLTEXT)
Oracle8i(TM) and ActivCard Gold(TM) Deliver the Confidence to Do Business On the Internet.
PR Newswire, p9646
Nov 10, 1998
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 484

... applications.
By embedding the complexities of strong authentication using one-time

use dynamic passwords and **digital signature** technology behind an interface as well-known as the **ATM** and combining this with the security and portability of a **smart card**, ActivCard Gold and Oracle8i are enabling next generation Internet applications such as e-commerce to...

16/3,K/10 (Item 10 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2005 The Gale Group. All rts. reserv.

05500956 Supplier Number: 48335662 (USE FORMAT 7 FOR FULLTEXT)
Diebold Licenses Certicom's Encryption System
COULTON, ANTOINETTE
American Banker, p12
March 4, 1998
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 644

... historically worked closely with Diebold, was an early Certicom licensee. Last year it demonstrated a **digital signature** operation on a **smart card**. Verifone uses the Certicom cryptosystem in its Personal **ATM**, a hand-held **smart card** reader that can hook into telephone lines.
"Diebold is a highly credible company, and that..."

16/3,K/11 (Item 11 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2005 The Gale Group. All rts. reserv.

05228625 Supplier Number: 47974211 (USE FORMAT 7 FOR FULLTEXT)
DIGITAL SIGNATURES PAVE WAY FOR ONLINE BANKING
Retail Delivery Systems News, v2, n18, pN/A
Sept 12, 1997
Language: English Record Type: Fulltext
Document Type: Newsletter; Trade
Word Count: 1004

... into smart cards will allow consumers to take that card to any computer or automated **teller machine (ATM)**, log on, and conduct banking transactions. **Digital Signatures On Smart Cards**
"Smart cards are a huge boom to the use of **digital signature** and digital certificates," says Greg Smirin, group product manager at Mountain View, Calif.-based Verisign...

16/3,K/12 (Item 12 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2005 The Gale Group. All rts. reserv.

05134795 Supplier Number: 47838129 (USE FORMAT 7 FOR FULLTEXT)
Can Smartcards Unlock Electronic Cash Vaults?
Hudgins-Bonafield, Christy
Network Computing, p24
July 15, 1997
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 1104

... years. By fall, Maher says trials might involve applications that

include a Mondex purse, a **digital signature** and physical door access.

The popularity of **smartcards** also hinges on the availability of PC, **ATM** and POS readers, as well as back-end merchant and bank systems. Gary O'Neill...

16/3,K/13 (Item 13 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2005 The Gale Group. All rts. reserv.

02399394 Supplier Number: 43155581 (USE FORMAT 7 FOR FULLTEXT)
Signature call by EC
Electronics Times, p48
July 16, 1992
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 66

... such as medicine, transport, finance, energy and manufacturing which depend on international data interchange.

The **electronic signature devices** will need to combine **digital signature**, **smart card**, and multi-application technology.

16/3,K/14 (Item 1 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB
(c)2005 The Gale Group. All rts. reserv.

08405483 SUPPLIER NUMBER: 17812861 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Digitized vs. digital. (signatures for banking and other services)
Orr, Bill
ABA Banking Journal, v88, n1, p64(1)
Jan, 1996
ISSN: 0194-5947 LANGUAGE: English RECORD TYPE: Fulltext; Abstract
WORD COUNT: 661 LINE COUNT: 00057

... require a peripheral attachment to the personal computer at which the user is "signing" the **electronic** document. This **device** could accept a **smart card** containing the **digital signature**, along with other transaction data. Standard encryption methods would bind the digital signature to the...

16/3,K/15 (Item 1 from file: 9)
DIALOG(R)File 9:Business & Industry(R)
(c) 2005 The Gale Group. All rts. reserv.

02022405 Supplier Number: 25528970 (USE FORMAT 7 OR 9 FOR FULLTEXT)
NYCE Offers Solution for Debit Use on the Web
(NYCE Corp unveils the SafeDebit system for handling secure banking transactions over the Internet)
American Banker, v 164, n 237, p 13
December 13, 1999
DOCUMENT TYPE: Newspaper ISSN: 0002-7561 (United States)
LANGUAGE: English RECORD TYPE: Fulltext
WORD COUNT: 950

(USE FORMAT 7 OR 9 FOR FULLTEXT)

TEXT:

...introduction this year of the Blue card:

Another way of authenticating customers, with or without **smart cards**, is **digital signature** and certificate technology. The **ATM** network Star Systems, Citibank, and several others joined a National Automated Clearing House Association project...

16/3,K/16 (Item 2 from file: 9)
DIALOG(R)File 9:Business & Industry(R)
(c) 2005 The Gale Group. All rts. reserv.

01931562 Supplier Number: 25418433 (USE FORMAT 7 OR 9 FOR FULLTEXT)
Authentication Firm May Get Lift from Entrust and Ingram Micro Deals
(Activcard Inc receives "Entrust-Ready" designation from Entrust Technologies Inc, easing linkage between Activcard identity devices and the popular public key infrastructure)
American Banker, v 164, n 168, p 10
September 01, 1999
DOCUMENT TYPE: Newspaper ISSN: 0002-7561 (United States)
LANGUAGE: English RECORD TYPE: Fulltext
WORD COUNT: 370

(USE FORMAT 7 OR 9 FOR FULLTEXT)

TEXT:

...a full-fledged public key infrastructure with digital credentials. Activcard sells the package as an "**ATM** -like process" with **smart card** readers. Entry of a personal identification number generates a **digital signature** for secure network access.

Activcard Inc. president Tom Arthur said that the Activcard-Entrust is...

16/3,K/17 (Item 1 from file: 20)
DIALOG(R)File 20:Dialog Global Reporter
(c) 2005 The Dialog Corp. All rts. reserv.

06974016 (USE FORMAT 7 OR 9 FOR FULLTEXT)
Authentication Firm May Get Lift from Entrust and Ingram Micro Deals
SECTION TITLE: Smart Cards
JEFFREY KUTLER
AMERICAN BANKER , v164, p10
September 01, 1999
JOURNAL CODE: WAMB LANGUAGE: English RECORD TYPE: FULLTEXT
WORD COUNT: 385

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... a full-fledged public key infrastructure with digital credentials. Activcard sells the package as an "**ATM** -like process" with **smart card** readers. Entry of a personal identification number generates a **digital signature** for secure network access.

Activcard Inc. president Tom Arthur said that the Activcard-Entrust is ...

16/3,K/18 (Item 1 from file: 647)
DIALOG(R)File 647:CMP Computer Fulltext
(c) 2005 CMP Media, LLC. All rts. reserv.

01130840 CMP ACCESSION NUMBER: NWC19970701S0017
Can Smartcards Unlock Electronic Cash Vaults? (Context - Background news analysis)
Christy Hudgins-Bonafield
NETWORK COMPUTING, 1997, n 812, PG24
PUBLICATION DATE: 970701
JOURNAL CODE: NWC LANGUAGE: English
RECORD TYPE: Fulltext
SECTION HEADING: Business Trends
WORD COUNT: 1103

... years. By fall, Maher says trials might involve applications that include a Mondex purse, a **digital signature** and physical door access. The popularity of **smartcards** also hinges on the availability of PC, **ATM** and POS readers, as well as back-end merchant and bank systems. Gary O'Neill...

16/3,K/19 (Item 1 from file: 696)
DIALOG(R)File 696:DIALOG Telecom. Newsletters
(c) 2005 The Dialog Corp. All rts. reserv.

00727638
NACHA ATM Payments Pilot to Use Smart Cards for Digital Signature
S
Report on Smart Cards
May 29, 2000 VOL: 14 ISSUE: 10 DOCUMENT TYPE: NEWSLETTER
PUBLISHER: BRP PUBLICATIONS
LANGUAGE: ENGLISH WORD COUNT: 854 RECORD TYPE: FULLTEXT

(c) BRP PUBLICATIONS All Rts. Reserv.

NACHA ATM Payments Pilot to Use Smart Cards for Digital Signature
S
?

21/3,K/1 (Item 1 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2005 The Gale Group. All rts. reserv.

07404951 Supplier Number: 62199952 (USE FORMAT 7 FOR FULLTEXT)

Banks Step Up Security. (Industry Trend or Event)

Luke, Rob

Bank Technology News, v14, n4, p1

April, 2000

Language: English Record Type: Fulltext

Document Type: Magazine/Journal; Trade

Word Count: 3112

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

...recipient of online transactions to verify themselves and each other, most commonly by attaching a " **digital certificate** " or some other form of **digital signature** , which could even be an electronic fingerprint. "These are the technologies of the future," says...

...Corp., which launched its secured access-control service to corporate customers early last year. PKI, **digital certificates** The necessary infrastructure for user authentication, known as public key infrastructure, or PKI, consists of two security "keys." One is the public key (the **digital certificate**), which is either downloaded from a browser or called up from a hard drive and...

...RSA key, after RSA Security Inc., the company whose subsidiary is the market leader in **digital certificate** supply. The private key sits on the hard drive of a computer and, when activated...

...York-based Deloitte & Touche LLP, part of global consultancy Deloitte Touche Tohmatsu, says PKI and **digital certificates** solve the overlapping problems of safeguarding privacy and security. "Pursuing customer confidentiality has become a...

...a significant book of corporate customers with transactions of more than \$1 million are deploying **digital certificate** technology. Typically, the financial institution provides customers with the necessary hardware and software to access...

...country's largest bank with 30 million retail and 2 million business customers, rolled out **digital certificates** in January last year to 400 online customers of Bank of America Direct, the bank...

...in charge of authentication services at BofA, while declining to offer specific figures. Hicks says **digital certificates** allow BofA Direct customers to conduct secure transactions with the bank and its customers, and...

...supplier Cisco Systems Inc. of San Jose, CA. It will allow Cisco to verify the **digital certificates** of its customers using the bank network, thus generating an additional source of revenue for...

...founding member of Identrus, a global trust organization formed last year to provide authentication for **digital certificates** . Other Identrus founders include ABN AMRO, Bankers Trust, Barclays Bank, Chase Manhattan Bank, Citigroup, Deutsche...of the founding banks. But some bankers and security analysts point out that the PKI- **digital certificate** system has security weaknesses. They say the private key can still be reached by a...

...Blue hold a microchip that can store data, digital cash, and a private key and **digital certificate** . The chief advantage is that the user takes the key out of the computer and...

...wider applications of the smart card, Hicks of BofA says. These include storing and sending **digital certificates** and downloading digital cash as well as making credit, debit and **ATM** transactions. The \$633 billion bank advocates storing users' fingerprint templates on individual smart cards for...

21/3,K/2 (Item 2 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2005 The Gale Group. All rts. reserv.

06973234 Supplier Number: 58960079 (USE FORMAT 7 FOR FULLTEXT)
Celo Simplifies Retail E-Commerce Transaction Security.
PR Newswire, p0318
Jan 26, 2000
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 510

... banks, brokerages and other service providers to secure their retail customers' e-commerce transactions using **digital signatures** . CeloCom Web lets anyone register, install and use X.509 **digital certificates** from leading certificate issuers as quickly and easily as activating and using an **ATM** card, creating more secure transactions and opening the door to a wider array of e...

21/3,K/3 (Item 3 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
(c) 2005 The Gale Group. All rts. reserv.

06806806 Supplier Number: 57560778 (USE FORMAT 7 FOR FULLTEXT)
ActivCard Extends Its Relationship With Microsoft.
PR Newswire, p4518
Nov 15, 1999
Language: English Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 530

... and Microsoft IIS web pages and enabling the smart card-based use of popular PKI **digital certificates** and **private keys** with Microsoft Internet Explorer and Outlook. ActivCard Gold enables Windows login to become "smart card...

...security to the overall system and provides users with the simple experience of using an **ATM** when logging into their Windows Workstation.
"We are at the cusp of an evolutionary change...

21/3,K/4 (Item 4 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)
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04456932 Supplier Number: 46542766 (USE FORMAT 7 FOR FULLTEXT)
CYLINK ANNOUNCES TWO NEW SOFTWARE CLIENT APPLICATIONS FOR SECUREACCESS

News Release, pN/A
July 15, 1996
Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 488

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

...our customer's business requirements" said Mr. Morris. "With our expertise in Public Key Cryptography, **Digital Certificates** and Certificate Authority software, Cylink will continue to release products that solve urgent information security...

...All SecureAccess products use the Data Encryption Standard (DES) for high quality security and the **Digital Signature** Standard (DSS) for authentication with X.509 certificates. X.509 is the emerging international and...

...area networks (WANs), public packet switched networks (such as the Internet) and Asynchronous Transfer Mode (**ATM**) and Frame Relay networks. Headquartered in Sunnyvale, California, Cylink's customers include Fortune 500 companies...

21/3,K/5 (Item 1 from file: 636)
DIALOG(R)File 636:Gale Group Newsletter DB(TM)
(c) 2005 The Gale Group. All rts. reserv.

04905187 Supplier Number: 70368995 (USE FORMAT 7 FOR FULLTEXT)
After An Election Debacle In Florida, Execs Tout A Chadless ATM Solution.
ATM & Debit News, v1, n12, p1
Jan 18, 2001
Language: English Record Type: Fulltext
Document Type: Newsletter; Trade
Word Count: 678

... real-time reporting of votes.
EMMA will support the use of passwords, personal identification numbers, **digital certificates**, **digital signatures**, and biometrics to identify voters. The **ATM** also will be able to display candidates' photographs and biographic information. All aspects of the...

21/3,K/6 (Item 2 from file: 636)
DIALOG(R)File 636:Gale Group Newsletter DB(TM)
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04074283 Supplier Number: 53603492 (USE FORMAT 7 FOR FULLTEXT)
Scotiabank launches electronic banking unit.
Distribution Management Briefing, n37, pNA
Jan, 1999
Language: English Record Type: Fulltext
Document Type: Newsletter; Trade
Word Count: 1787

(USE FORMAT 7 FOR FULLTEXT)

TEXT:

...completes a very vital link in our design," PKI security is based on mathematical keys - **digital certificates** - to authenticate customers, provide **digital signatures** and assure information integrity and

confidentiality. NCR signs European trio to pilot iris ID NCR...alliance between CBA and Woolworths, due to be launched early next year. Diebold unveils enhanced **ATM** features DIEBOLD HAS developed new automated teller machine (**ATM**) features that allow deployers of the machines to cross-sell services through personalised, onscreen marketing...

...Diebold senior director of worldwide marketing Thomas Swidarski. "Our one-to-one marketing concept allows **ATM** deployers to use their existing customer database for information that can help them target a specific message to the consumer at the **ATM**," he added. Diebold's one-to-one **ATM** marketing concept uses the waiting time of a standard **ATM** authorisation period to display interactive messages to consumers about products and services. As it works in conjunction with an **ATM** deployer's customer information database, the system allows institutions to customise the advertising message depending upon demographics, existing account relationships or retail buying habits. A bank customer using an **ATM** during the holiday season, for example, might be shown a promotion for debt consolidation loans on one transaction, while the frequent **ATM** user next in line, who is not a bank customer, might read about a new checking account that waives **ATM** transaction fees. Customers may also be prompted to respond to onscreen questions, which may even...

...marketing departments for proper follow-up. As it runs during the waiting phase of the **ATM** transaction, one- to-one marketing does not delay transaction times or create long waiting lines...

...is offered can do so by answering in the negative to the onscreen prompts. For **ATM** deployers, the system provides a tracking capability that allows them to monitor the success of the **ATM** marketing programme. It can also be configured to dispense a coupon from the **ATM** receipt printer as a way to reinforce a message. Swidarski said that the technology has two big attractions for Diebold's clients. "It not only helps **ATM** deployers build customer loyalty but it provides them with a revenue-generating advertising medium that...

21/3,K/7 (Item 3 from file: 636)
DIALOG(R)File 636:Gale Group Newsletter DB(TM)
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04033356 Supplier Number: 53360651 (USE FORMAT 7 FOR FULLTEXT)

New Directions.

Bank Technology News, pNA
March, 1998

Language: English Record Type: Fulltext
Document Type: Magazine/Journal; Trade
Word Count: 7229

... have guessed that the geographic spread of Utah was a contributor to the spread of **digital signatures**. Indeed, Utah's state government passed legislation in 1995 recognizing **digital signatures** as a legal means to authenticate electronic communications-the first government body to do so...

...progressive in this area. "Utah is spread out geographically," explains Jon Matonis, vice president of **Digital Signature** Trust Company (DST) in Salt Lake City, UT. "It didn't make sense to drive...

...in Salt Lake City." So the state of Utah sought to create a system of **digital signatures** to accompany the electronic filing of court.

documents. To which organization did the state turn...

...the technology to motor vehicle registrations and state health care processing and filings, as well. **Digital signatures** can be applied "anywhere there's a paper-based process," Matonis notes. But **digital signatures** can only be applied in conjunction with certificate authorities (CAs), which are independent organizations that guarantee the authenticity of **digital signatures**. Many think that those third party CAs should be banks, since they have been in...

...take on the challenge of being a CA. Zions formed DST last year to provide **digital signature** authentication and certification. Impetus for the initiative came directly from Zion's CEO and president...

...serve as part of Utah's E-Commerce Group, a consortium formed to develop a **digital signature** system for the state. Ultimately, Zions is betting that its involvement in **digital signatures** today will ensure it a steady stream of fee income tomorrow. In its 1996 annual...

...investment in creating DST, the subsidiary already is staffed up with 22 employees. In providing **digital certificate** services, Zions and DST intend to compete head-to-head against other established CA service...would like to use them on an outsourcing basis. By contracting with a number of **digital certificate** software providers, Zions is able to offer different levels, types and formats of **digital certificate** security. For example, customers wanting to employ only SET (Secure Electronic Transaction) certificates, would contract to use GlobeSet via DST's service bureau. Customers wanting a **digital certificate** stored on a hardware token would be directed to the Xcert product. Customers are able...

...In the world of electronic commerce, you need a trusted third party to identify a **digital signature**," says Jay Simmons, vice president of CertCo. "That third party is banks. Who knows more..."

...has been reviewing the technology for about two years. "We got our first taste of **digital certificate** technology as part of Visa's early SET pilots," says Parker Foley, vice president of...

...Currently, First Union has a pilot project underway with the state of Georgia to enable **digital signatures** on quarterly tax filings from mortgage lenders in the state. "We've begun to explore..."

...usage, then extend to business banking, brokerage, and wire transfers, he says. One advantage of **digital certificates** First Union has found is the simplicity of use they offer customers. First Union's home banking environment currently requires three different passwords for access, Foley notes. "With the **digital certificate**, only one password is required." Across town, NationsBank, of Charlotte, NC, recently inked an agreement with VeriSign for it to issue **digital certificates** for its global corporate and investment banking customers. NationsBank will begin deploying **digital certificates** for those customers in early 1998 for use with NationsBank Direct (SSM), an Internet-based...

...foreign currency payments, receipts, treasuries, foreign exchange, trade finance, investments and borrowing. NationsBank will issue **digital certificates** under its own brand, while VeriSign will manage the processing services associated with being a...

...pay for secure transaction capabilities online than are retail customers." NationsBank also plans to introduce **digital certificates** for employees this year. The certificates will be used for electronic

employee identification badges, as...

...There's good reason why banks like NationsBank and First Union are taking advantage of **digital certificates**, but not moving full steam ahead to become CAs themselves. It can be tough being...Even more messy: "CAs need to take extensive technical and operational security precautions. If the **private keys** of a CA are compromised, all of the certificates issued by the CA immediately become...

...can benefit greatly by taking on leadership roles and becoming CAs. The key role of **digital certificates** in banking hinges on brand loyalty and the customer relationship, he says. This essentially will...analyst at Piper Jaffray, Minneapolis. "They can then package together additional services. Dedicated non-bank **ATM** companies, like Triton, can't package it all like that." Broad business base With all...

...and institutions want an alternative." <SS>Types Of Certificate Authorities Universal CAs Universal CAs issue **digital certificates** that are designed to be used as widely as possible. Today, there are very few universal CAs in operation that issue **digital certificates**. There are, however, a number of universal CAs that issue paper certificates, the best example...

...universally accepted as proof of identification. While the government does not issue the equivalent of **digital certificates** today, it is a safe bet that it will do so. Indeed, the U.S...

...issue paper certificates (or in this case, plastic certificates) and have plans to begin issuing **digital certificates**. Other firms, such as the start-up VeriSign, are also attempting to establish themselves as... certificates gives Citibank the freedom to customize and improve its services quickly. <SS>NACHA Tests **Digital Certificates** <BI>By David Stahl A pilot that the National Automated Clearing House Association and five...

...York and Verisign of Redwood City, CA, all of which market their own version of **digital certificates**. Each of the five banks has teamed with one or more technology vendors, and each team is running its own test. Under the pilot, the banks will hold **digital certificates** for their retail and merchant customers. The **digital certificate** authorities want to make certain that a customer's **digital certificate**, held at Bank X, really belongs to that customer. This verification enables the merchant to ...

...on this relationship for the Internet." NACHA designed the pilot because it recently ruled that **digital signatures** have the same legal properties as physical signatures. In addition, Netscape's latest version of...

...documents. In fact, this signature feature is part of the NACHA pilot. Aside from issuing **digital certificates**, the participating banks will maintain files with certificate numbers, expiration dates and other pertinent data...

21/3,K/8 (Item 1 from file: 9)
DIALOG(R)File 9:Business & Industry(R)
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01420075 Supplier Number: 24046321 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Sylvia Keys

16-Jun-05 08:34 AM

IS SET USEFUL TO THE NON-US WORLD?

(SET (Secure Electronic Transactions) protocol has been proposed by Mastercard and Visa as the preferred method of operating electronic commerce via the Internet; main technology participants are all US-based)

Virtual Finance Report, n 9, p 8-9

October 01, 1997

DOCUMENT TYPE: Newsletter (United Kingdom)

LANGUAGE: English RECORD TYPE: Fulltext

WORD COUNT: 1744

(USE FORMAT 7 OR 9 FOR FULLTEXT)

ABSTRACT:

...access to the credit card details, and

the cardholder cannot deny having authorised the purchase. **Digital certificates** and **digital signatures** are used to achieve the first 3 items, and are intended to address the last item. Credit card details are not directly included in the **digital certificate** or payment message, but are made available, through encryption, to a SET payment gateway, which verifies the **digital signature** before passing the payment message onto an acquiring bank, perhaps through the existing Mastercard or Visa networks. Current **digital signature** technology is based on Public Key encryption, of which RSA is the most well known...

...cryptography is more computationally expensive than the symmetric key DES encryption used in today's **ATM**'s and PINpads. A **digital signature** is created by using the Private Key associated with the cardholder **digital certificate**. However, in the non-US world, the comparatively low number of banks per country meant...

TEXT:

...payment message onto an acquiring bank, perhaps through the existing Mastercard or Visa networks.

Current **digital signature** technology is based on Public Key encryption, of which RSA is the most well known...

...than the symmetric key DES encryption used in today's **ATM**'s and PINpads. A **digital signature** is created by using the Private Key associated with the cardholder **digital certificate**.

The US perspective:

The US is reported to have around 17,000 banks. In this...

21/3,K/9 (Item 1 from file: 15)

DIALOG(R)File 15:ABI/Inform(R)

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02107494 66442419

ATMs get a boost from the election snafu

Anonymous

Credit Card Management v13n10 PP: 8 Jan 2001

ISSN: 0896-9329 JRNL CODE: CCM

WORD COUNT: 509

...TEXT: any central election data center.

Sylvia Keys

16-Jun-05 08:34 AM

EMMA will support the use of passwords, personal identification numbers, **digital certificates**, **digital signatures**, and biometrics to identify voters. The **ATM** also will be able to display candidates' photographs and information about the candidates. All aspects...

21/3,K/10 (Item 1 from file: 20)

DIALOG(R)File 20:Dialog Global Reporter
(c) 2005 The Dialog Corp. All rts. reserv.

06352663 (USE FORMAT 7 OR 9 FOR FULLTEXT)

Ministry scripts draft cyber laws for subscribers

Harshad Oke

ECONOMIC TIMES OF INDIA

July 18, 1999

JOURNAL CODE: WETI LANGUAGE: English RECORD TYPE: FULLTEXT

WORD COUNT: 298

(USE FORMAT 7 OR 9 FOR FULLTEXT)

... duty of care upon a subscriber than that imposed on the holder of credit or **ATM** card. Draft laws al-so suggest persons who intentionally or negligently disclose **private keys** should be held liable to a higher standard than those responsible for involuntary disclosure.

21/3,K/11 (Item 1 from file: 696)

DIALOG(R)File 696:DIALOG Telecom. Newsletters
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00710766

Security Technology Hits Market Full Speed

WIRELESS DATA NEWS

February 2, 2000 VOL: 8 ISSUE: 3 DOCUMENT TYPE: NEWSLETTER

PUBLISHER: PHILLIPS BUSINESS INFORMATION

LANGUAGE: ENGLISH WORD COUNT: 506 RECORD TYPE: FULLTEXT

(c) PHILLIPS PUBLISHING INTERNATIONAL All Rts. Reserv.

TEXT:

...was on display at the RSA Conference in San Diego last month, where manufacturers of **digital certificates** - technology that ensures safe wireless transactions - unveiled a batch of freshly-baked promises and solutions...

...transactions with it," says Nagy Moustafa, president of Toronto-based Diversinet [DVNT], a developer of **digital signature** technology.

"The explosion of wireless e-commerce has resulted in the explosion of wireless security...

...delivering advanced

security technology to service providers in Europe, notably Finland.

The technology used with **digital certificates** in wireless devices for ecommerce is much more complicated than the "**ATM** and pin number" method, says Jeremy Wyant, a senior technologist for CyberTrust.

Last month, Sonera...

...CyberTrust technology. The device will be first

implemented for Sonera SmartTrust.

Undeniable E-Commerce Proof

Digital certificate technology enables users to digitally sign a document, which in certain jurisdictions, creates a legally...

...provides security for wireless devices by giving users a passport that identifies them, to include **digital certificates** for the wireless Palm Operating System.

In addition, Diversinet's permit server, a product that...

...the user credit for electronic transactions, is now available.

Moustafa says Diversinet's devices, and **digital certificates** in general, will enable consumers to enact transactions on PDAs, handsets and pagers.

He says s **digital certificate** technology.

In terms of the usage of wireless security, Finland is a leader among the...

21/3,K/12 (Item 2 from file: 696)
DIALOG(R)File 696:DIALOG Telecom. Newsletters
(c) 2005 The Dialog Corp. All rts. reserv.

00703317

Security Notes

Telecom & Data Network Security

December 01, 1999 VOL: 7 ISSUE: 12 DOCUMENT TYPE: NEWSLETTER

PUBLISHER: BRP PUBLICATIONS

LANGUAGE: ENGLISH WORD COUNT: 798 RECORD TYPE: FULLTEXT

(c) BRP PUBLICATIONS All Rts. Reserv.

TEXT:

...Consumers participating in the pilot use a private key to generate **digital signatures**. When buying an item online, the consumer offers an **ATM** card number and digitally signs an electronic authorization form rather than enter a personal identification number. The consumer's financial institution would verify the **digital signature** for merchant confirmation, and the customer's checking account would be debited through a participating **ATM** network. Pilot participants will conduct technical tests using **digital certificates** late this year and begin making online transactions next spring...

21/3,K/13 (Item 3 from file: 696)
DIALOG(R)File 696:DIALOG Telecom. Newsletters
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00619909

FRAME RELAY UPDATE

BROADBAND NETWORKING NEWS

August 18, 1998 VOL: 8 ISSUE: 17 DOCUMENT TYPE: NEWSLETTER

PUBLISHER: PHILLIPS BUSINESS INFORMATION

LANGUAGE: ENGLISH WORD COUNT: 532 RECORD TYPE: FULLTEXT

(c) PHILLIPS PUBLISHING INTERNATIONAL All Rts. Reserv.

TEXT:

...networking systems, and Diebold Inc. [DBD], a Canton, Ohio-based manufacturer of automated teller machines (**ATM**), have entered into a service agreement to provide a single-source communications package developed exclusively...

...Diebold will combine TimePlex's SYNCHRONY IAN-150 frame relay access switch products with Diebold **ATM** platforms. The frame relay equipment will provide greater networking bandwidth and enable a more efficient delivery of advanced features such as full-motion video for advertising at the **ATM** or digital security images taken at the **ATM** site.

The agreement also allows Diebold to provide an integrated package of communication services to...

...subsidiary, Algorithmic Research, provide encryption-based network security solutions. The SFU-L encryptor uses the **digital signature** standard-based **digital certificate** system to positively identify other Cylink frame relay encryptors before making a connection. Once a...
?

24/5/1 (Item 1 from file: 613)

DIALOG(R)File 613:PR Newswire

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00730807 20020311CLM010 (USE FORMAT 7 FOR FULLTEXT)

Diebold Triple Data Encryption for ATM DES Key Mgt.

PR Newswire

Monday, March 11, 2002 10:14 EST

JOURNAL CODE: PR LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT

DOCUMENT TYPE: NEWSWIRE

WORD COUNT: 627

LEAD PARAGRAPH:

NORTH CANTON, Ohio, March 11 /PRNewswire-FirstCall/ - Diebold today announced support for the industry transition to triple DES encryption, which is used to protect personal identification numbers (PINs) during automated teller machine (ATM) transactions. To help financial institutions comply with the new requirements, Diebold is offering new encrypting pin pad (EPP) solutions for use in its ATMs worldwide. EPPs are designed to meet the requirements for PIN encryption as well as the requirements for a tamper-resistant security module. EPPs will support a variety of keypad configurations to meet the needs of financial institutions and various regulatory requirements.

(Photo: <http://www.newscom.com/cgi-bin/prnh/20000608/DIEBLOGO>)

In addition to helping financial institutions comply with the requirement for unique DES encryption keys in every ATM, Diebold is adding the ability to remotely load DES keys into the encrypting pin pad using the banks existing ATM driving software. This capability, known as remote key transport, eliminates the need for personnel to visit each machine to manually load DES keys. Remote key transport uses public key cryptography to protect the keys during transmission from the host to the ATM. It also supports digital certificates provided by Digital Signature Trust of Salt Lake City, Utah, to authenticate the host and the ATM to one another, and to protect against unauthorized computers from gaining access to the DES keys. This is the first time public key cryptography and digital certificates have been used together to simplify DES key loading while providing a high degree of security.

An important safeguard for remote key transport is the use of digital certificates in the process. "Digital certificates have proven to offer a high degree of security and privacy across the entire spectrum of networks," said

Scott Schrader, financial services group president for Digital Signature Trust. "These device certificates provide a means to protect the exchange of data on a financial institutions self-service network."

Remote key transport reduces the expense and complicated logistics required to load keys in ATMs. Simplifying the process will make key management, including routine changes to the keys, easier for institutions.

"With remote key transport, DES keys can be changed anytime an institution feels it is necessary," said Dean D. Stewart, director of Diebold's Product

Management group. "Unique keys in every ATM and the use of triple DES encryption significantly increases the difficulty of compromising ATM transactions."

About Digital Signature Trust

With its flagship TrustID digital certificate solutions program, Digital Signature Trust (DST) provides a high level of risk management available for private and trusted e-business transactions. TrustID is the only certificate sponsored by the American Bankers Association and the Mortgage Bankers Association of America. The TrustID Certificate Policy provides the foundation for truly interoperable digital identity credentials, giving institutions and businesses, their constituencies and their business partners one universally accepted digital certificate that simplifies and streamlines their e-business processes and transactions, making them trusted and secure. Acting as the trusted third party, DST provides managed digital certificate services so businesses can integrate digital signatures into their e-business applications quickly and efficiently, virtually eliminating the risk of identity fraud. DST is a subsidiary of Zions First National Bank. For more information, visit www.trustDST.com.

COMPANY NAMES: Diebold , Incorporated ; Digital Signature Trust
GEOGRAPHIC NAMES: AMERICAS; NEW YORK; NORTH AMERICA; OHIO; USA
INDUSTRY NAMES: FINANCIAL SERVICES; ATMS; BANKING; BANKING AUTOMATION;
COMMUNICATIONS TECHNOLOGIES; COMPUTER SECURITY; COMPUTERS; CORPORATE;
ELECTRONIC COMMERCE; INSTITUTIONS; INVESTMENT; SECURITY; STOCKS AND
SHARES
EVENT NAMES: CORPORATE GROUPS AND OWNERSHIP; MANAGEMENT PROCEDURES;
ORGANISATIONS AND INSTITUTIONS; STOCKS AND SHARES

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Set	Items	Description
S1	14373	SMARTCARD? OR (SMART OR CHIP) () (CARD OR CARDS)
S2	2039	DIGITAL() (CERTIFICATE? OR TOKEN OR TOKENS) OR CHIPCARD? OR ELECTRONIC() APPLIANCE?
S3	101899	ATM OR AUTOMATIC() TELLER() MACHINE?
S4	65339	(BANKING() MACHINE? OR (TELLER? OR TRANSACTION? OR ELECTRONIC?) (2N) (MACHINE? OR DEVICE? OR APPARATUS?) OR CONSUMER() TRANSACTION() FACILIT? OR AUTOMATIC() DEPOSIT() PAYMENT() MACHINE?)
S5	6560	(DIGITAL OR CRYPTOGRAPH? OR ENCODE?) () (SIGNATURE? OR SIGNING)
S6	1029	(PRIVATE OR PERSONAL OR SECRET) () (KEYS OR KEYS)
S7	179	DIEBOLD() INC?
S8	32913	AU=(PARMELEE, C? OR PERMELEE C? OR SMITH, M? OR SMITH M?)
S9	16171	S1 OR S2
S10	163652	S3 OR S4
S11	7450	S5 OR S6
S12	537	S9 AND S10
S13	6	S12 AND S11
S14	0	S2 AND S3 AND S5
S15	0	S2 AND S3 AND S6
S16	13	S2 AND S3
S17	13	S16 NOT S13
S18	12	S17 NOT PY>2001
S19	0	S7 AND S2
S20	30	S7 AND S3
S21	29	S20 NOT PY>2001
S22	28	RD (unique items)
S23	0	S22 AND S6
S24	0	S22 AND S5
S25	94	S8 AND (S9 OR S10 OR S11)
S26	94	S25 NOT (S13 OR S22)
S27	66	S26 NOT PY>2001
S28	57	RD (unique items)
S29	0	S28 AND SIGNATURE?

13/5/1 (Item 1 from file: 256)
DIALOG(R)File 256:TecInfoSource
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01193062 DOCUMENT TYPE: Product

PRODUCT NAME: payShield (193062)

nCipher Corp Ltd (657921)
Jupiter House Station Rd
Cambridge, UK CB1 2JD United Kingdom
TELEPHONE: () 122-3723600

RECORD TYPE: Directory

CONTACT: Sales Department

nCipher's payShield (TM) is a hardware security system that processes electronic payments. It allows banks, payment processors, and merchants to

support Visa 3-D Secure and MasterCard SecureCode cryptographic requirements. The system provides users with cardholder authentication and FIPS 140-2 Level 3 protection features. payShield handles a wide range of EMV **smart card** and **ATM** PIN functions. The system protects cardholder passwords and other personal data. It creates digitally signed approvals for merchants. payShield offers users SCSI and Ethernet connectivity options. It can be customized to support special encryption, decryption, and **digital signature** functions.

DESCRIPTORS: ATMs; Banks; Credit Cards; **Digital Signatures** ; E-Commerce ; E-Payment; Encryption; Financial Institutions; Internet Security; Retailers; **Smart Cards** ; System Monitoring; User Identity Management

HARDWARE: Hardware Independent
OPERATING SYSTEM: Open Systems
PROGRAM LANGUAGES: Not Available
TYPE OF PRODUCT: Mainframe; Mini; Micro; Workstation
POTENTIAL USERS: Cross Industry
PRICE: Available upon request

REVISION DATE: 20040311

13/5/2 (Item 1 from file: 2)
DIALOG(R)File 2:INSPEC
(c) 2005 Institution of Electrical Engineers. All rts. reserv.

4896922 INSPEC Abstract Number: C9504-7120-016

Title: Digital payment systems in the ESPRIT project CAFE

Author(s): Boly, J.-P.; Bosselaers, A.; Cramer, R.; Michelsen, R.; Mjolsnes, S.; Muller, F.; Pedersen, T.; Pfitzmann, B.; de Rooij, P.; Schoenmakers, B.; Schunter, M.; Vallee, L.; Waidner, M.

Author Affiliation: PTT Res. Neher Labs., Leidschendam, Netherlands
p.35-45, 337

Publisher: M.C.I.-Manifestations et Commun. Int, Paris, France

Publication Date: 1994 Country of Publication: France 357 pp.

Conference Title: Proceedings of Securicom ' 94

Conference Date: 1-2 June 1994 Conference Location: Paris, France

Language: English Document Type: Conference Paper (PA)

Treatment: General, Review (G)

Abstract: CAFE ("Conditional Access for Europe") is an ongoing project in

Sylvia Keys

16-Jun-05 08:11 AM

the European Community's ESPRIT program. Its goal is to develop innovative systems for conditional access, and in particular, digital payment systems. Its basis are **smartcards** and small portable **devices** called **electronic wallets**, whose outlook is quite similar to pocket calculators or PDAs (personal digital assistants). An important aspect of CAFE is high security of all parties, with the least possible requirements that they are forced to trust other parties. Moreover, both the electronic money issuer and the individual users are less dependent on the tamper-resistance of devices than in usual digital payment systems. An important tool are **digital signatures** (public-key cryptology). Since CAFE aims at the market of small everyday payments that is currently dominated by cash, payments are offline, and privacy is an important issue. If deemed necessary, an upper limit on the amounts that can be paid in this cash-like way can be fixed. Other features that the CAFE payment system offers are: open architecture and system, loss tolerance, and different currencies. The aim is to demonstrate a set of the systems developed in one or more field trials at the end of the project. (15 Refs)

Subfile: C

Descriptors: authorisation; data privacy; EFTS; notebook computers; public key cryptography; research initiatives; **smart cards**

Identifiers: digital payment systems; ESPRIT project; CAFE; Conditional Access for Europe; **smartcards**; portable devices; electronic wallets; security; electronic money; tamper-resistance; public-key cryptology; **digital signatures**; offline payments; privacy; cash limits; open architecture; loss tolerance; currencies; field trials

Class Codes: C7120 (Financial computing); C6130S (Data security); C0230 (Economic, social and political aspects of computing); C5430 (Microcomputers)

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13/5/3 (Item 1 from file: 583)
DIALOG(R)File 583:Gale Group Globalbase(TM)
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09238434

A chip off the old block

UK: GROWING POPULARITY OF **SMART CARDS**
Banking Technology (BTY) Feb 2000 p.25, 27-8
Language: ENGLISH

Following the introduction of debit, credit and cash machine **smart cards** to the UK in Spring 1999, the full roll-out is expected to be completed by the end of 2002. The process, involving the replacement of a total of around 116mn cards, offers the potential for a dramatic reduction in plastic card fraud and counterfeiting, according to the Association for Payment and Clearing Services (Apacs). The combination of **smart cards** and public key infrastructure (PKI), with **digital signatures** for the authentication of identities, would do a great deal to reduce such crimes. The old-style magnetic strip cards can only be discontinued, however, when every point-of-sale terminal and **ATM** in the UK is converted to read the integrated computer chips of **smart cards**. Banks, which bear much of the financial burden of fraud, are assisting merchants with the costs of the changeover.

COMPANY: APACS; ASSN FOR PAYMENT & CLEARING SERVICES
PRODUCT: Debit Card Svcs (6020DC); Nonbank Credit Card Firms (6141);
Smart Cards (3078SC); Consumer Finance Institutions (6140);
EVENT: Sales & Consumption (65); National Government Economics (94);
Workers by Type (56);

COUNTRY: United Kingdom (4UK);

13/5/4 (Item 2 from file: 583)

DIALOG(R)File 583:Gale Group Globalbase(TM)

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09149290

Thailand's banks get their hands on some smart electronic money

THAILAND: **SMART CARD** SYSTEM FROM MASTERCARD

Bangkok Post (XBN) 25 Aug 1999 database p.1

Language: ENGLISH

MasterCard International forecast that by year 2000, consumers in Thailand will be using chip-based cards to store their credit, bank cards and other applications like **digital signatures**, electronic cash and industry-specific loyalty programs. The firm was unveiling its Mondex ' **smart card** ' system in the country and has already sold 3,000 such terminals to petrol stations, banks and supermarkets. A small microprocessor is located in Mondex cards, which can download electronic cash to the card using a standard **ATM** machine. MasterCard hopes that Thailand will be one of the early adopters of the Mondex ' **smart card** ' system.

COMPANY: MASTERCARD INTL

PRODUCT: Credit Card Services (6020CC); Nonbank Credit Card Firms (6141);

EVENT: Product Design & Development (33); Planning & Information (22);

COUNTRY: Thailand (9THA);

13/5/5 (Item 3 from file: 583)

DIALOG(R)File 583:Gale Group Globalbase(TM)

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06306752

BACS signs up for **smart cards**

UK: **SMART CARD** TECHNOLOGY FOR BACS

Computer Weekly (CRW) 02 May 1996 p.3

Language: ENGLISH

The adoption of cheque imaging (the network transfer of cheque images), object technology and increased use of the Internet, are technological developments under consideration at BACS <UK>. However, the UK bank clearing house's first investment looks set to be the introduction of a PIN/encryption-based **smart card** in transaction management. The system would authorise Bacstel transactions by **digital signature** recognition and would take 11 months to develop. *

COMPANY: BACS

PRODUCT: Debit Card Svcs (6020DC); Nonbank Credit Card Firms (6141);

Smart Cards (3078SC); Cash Dispensers/ATM Systems (3573CD);

Electronic Banking Svcs (6005); Banking Institutions (6010);

EVENT: Capital Expenditure (43);

COUNTRY: United Kingdom (4UK);

13/5/6 (Item 1 from file: 8)

DIALOG(R)File 8:Ei Compendex(R)

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01913515 E.I. Monthly No: EIM8512-079798

Title: SMART CARDS , DIGITAL SIGNATURES AND NEGOTIABLE DOCUMENTS.

Author: Davies, D. W.

Corporate Source: Natl Physical Lab, Teddington, Engl

Conference Title: International Conference on Secure Communication Systems.

Conference Location: London, Engl **Conference Date:** 19840222

Sponsor: IEE, Electronics Div, London, Engl; IEE, Computing & Control Div, London, Engl; British Computer Soc, London, Engl; Inst of Acoustics, Edinburgh, Scotl; Inst of Physics, London, Engl

E.I. Conference No.: 05466

Source: IEE Conference Publication n 231. Publ by IEE, London, Engl p 1-4
Publication Year: 1984

CODEN: IECPB4 **ISBN:** 0-85296288-6

Language: English

Document Type: PA; (Conference Paper)

Journal Announcement: 8512

Abstract: In addition to cash, there are now many ways in which payments can be made. Those which are only partly automated and depend on paper documents such as check payments and credit card transactions, are expensive to operate and are being subjected to an increasing level of fraud. Consequently, the development of payment systems which are more secure and more fully automated has a high priority. One of these already exists in large numbers and is very successful namely the cash dispenser or **automatic teller machine (ATM)** with its plastic, magnetic striped card and personal identification number. Authentication of **digital signatures**, enciphering and deciphering functions, electronic checks, signature tokens for negotiable documents and other types of secret keying as a protection against theft are discussed.

Descriptors: *DATA PROCESSING, BUSINESS--*Security of Data; DATA PROCESSING--Financial Applications

Identifiers: PAYMENT SYSTEMS; **AUTOMATIC TELLER MACHINE**; MAGNETIC STRIPED CARDS; SIGNATURE VERIFICATION SCHEME; **SMART CARDS**

Classification Codes:

723 (Computer Software); 911 (Industrial Economics)

72 (COMPUTERS & DATA PROCESSING); 91 (ENGINEERING MANAGEMENT)

?

18/5/1 (Item 1 from file: 256)
DIALOG(R)File 256:TecInfoSource
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02601748 DOCUMENT TYPE: Company

Cylink Corp (601748)
3131 Jay St PO Box 54952
Santa Clara, CA 95056-0952 United States
TELEPHONE: (408) 855-6000
TOLL FREE TELEPHONE NUMBER: (800) 533-3958
FAX: (408) 855-6100
HOMEPAGE: <http://www.cylink.com>
TICKER: NASDAQ : CYLK

RECORD TYPE: Directory

CONTACT: Sales Department

ORGANIZATION TYPE: Corporation
EQUITY TYPE: Public
STATUS: Active

Cylink Corporation (NASDAQ:CYLK) enables secure data transmissions over LANs, WANs, public packet switched networks (the Internet), ATM, and frame relay networks. A pioneer of industry-standard public key management technology, Cylink has been a leader in enterprisewide security since 1984. At the core of the firm's product design is the Secure Enterprise Architecture--S.E.A. Stack (TM). This innovative architecture provides privacy, data integrity, authentication, access control, and nonrepudiation throughout a network. In 1990, Cylink introduced its AirLink product line of long-range digital, spread-spectrum microwave radio systems. Cylink is a single-source wireless communications provider. The company is headquartered in Northern California, with offices, distributors, and customer support worldwide. Its customers include Fortune 500 companies, multinational financial institutions, agribusiness, construction, and petrochemical firms, and numerous U.S. and international government agencies.

SALES: NA

DATE FOUNDED: 1983

PERSONNEL: Crowell, William P, Chief Executive Officer; Crowell, William P, President; Breeden, Phil, VP Engineering; Chillingworth, Christopher, Chief Financial Officer; Reilly, Pat, VP Sales; Reilly, Pat, VP Marketing; Walsh, Richard, VP Operations; Walsh, Richard, Chief Information Officer

DESCRIPTORS: Computer Security; Digital Certificates ; Encryption; Internet Security; LANs; Wireless Networks

REVISION DATE: 20020830

18/5/2 (Item 2 from file: 256)
DIALOG(R)File 256:TecInfoSource
(c) 2005 Info.Sources Inc. All rts. reserv.

00132760 DOCUMENT TYPE: Review

PRODUCT NAMES: SafeDebit (063347); 3-D Secure 1.0 (063355)

TITLE: Smart-Card Technology May Have a Smarter Rival: NYCE plans to

Sylvia Keys

16-Jun-05 08:13 AM

use...

AUTHOR: Mearian, Lucas

SOURCE: Computerworld, v35 n31 p19(1) Jul 30, 2001

ISSN: 0010-4841

HOMEPAGE: <http://www.computerworld.com>

RECORD TYPE: Review

REVIEW TYPE: Product Analysis

GRADE: Product Analysis, No Rating

NYCE Corporation's new software specification may streamline online payment processes. The new technology will compete directly with smart cards and will utilize **ATM** networks. Compared to smart cards, NYCE's technology is more affordable, and it does not require software installations. NYCE is offering its SafeDebit cards to 2,300 financial institutions. SafeDebit employs a miniature CD-ROM exchanges encrypted codes and passwords with online merchants. After clicking on a Web site's SafeDebit icon, consumers insert their Cd into their computer's drive and enter a personal identification number (PIN). Transaction rights then are verified by a bank using the **ATM** network. However, SafeDebit works only for online transactions. Visa International also is promoting an online authentication technology called 3-D Secure 1.0.

COMPANY NAME: NYCE Corp (710067); Visa International (640719)

SPECIAL FEATURE: Photographs

DESCRIPTORS: ATMs; **Digital Certificates** ; E-Banking; E-Payment

REVISION DATE: 20020830

18/5/3 (Item 3 from file: 256)

DIALOG(R)File 256:TecInfoSource

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00121145 DOCUMENT TYPE: Review

PRODUCT NAMES: **ASP (Application Service Providers)** (841242)

TITLE: ASP Attack: It'll Take All Your Wits to Pick the Right Application...

AUTHOR: Pappalardo, Denise

SOURCE: Network World, v16 n39 p70(4) Sep 27, 1999

ISSN: 0887-7661

HOMEPAGE: <http://www.nwfusion.com>

RECORD TYPE: Review

REVIEW TYPE: Product Analysis

GRADE: Product Analysis, No Rating

Application service providers (ASPs) offer rentable applications to multiple business users from a shared data center over the Internet, or an **ATM**, frame relay, or private-line network. The applications are accessed by the client from a user's PC via a standard World Wide Web browser, a thin client, or an application-specific client. The advantages that an ASP will provide for a business are improving services, obtaining a strategic advantage, reducing risks by being able to move quickly with low capital investments, and reducing costs. Services are improved with increased bandwidth, and an ASP will hire all the necessary software experts, giving small to midsize companies the chance to use top-tier applications they otherwise could not consider. However, most ASPs are nonspecific about security, and at a minimum, if an ASP data center is accessed via the

Internet, there should be IPSec-compliant firewalls that can support up to 128-bit key encryption, and some applications may even warrant the use of **digital certificates**.

COMPANY NAME: Vendor Independent (999999)
SPECIAL FEATURE: Tables
DESCRIPTORS: ASP (Application Service Providers); Computer Security; Data Center Operations; Encryption; Network Administration; Network Management; Network Software; Thin Clients
REVISION DATE: 20020630

18/5/4 (Item 1 from file: 583)
DIALOG(R)File 583:Gale Group Globalbase(TM)
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09459760
First bank adopts PKI standard
UK: RBS TO USE **DIGITAL CERTIFICATE** STANDARD
Computer Weekly (CRW) 01 Feb 2001 p.3
Language: ENGLISH

The Royal Bank of Scotland (RBS) will use the Identrus online **digital certificate** standard for firms which lease cars, making it the first bank to use Identrus. This will enable trading partners to exchange certificates on the Internet. According to a senior consultant from Ovum, information technology analyst, Graham Titterington, Identrus is unique worldwide and its use constitutes a major step forward for business-to-business electronic commerce. Titterington believes that other banks are likely to follow the RBS lead.

COMPANY: ROYAL BANK OF SCOTLAND
PRODUCT: Cash Dispensers/ **ATM** Systems (3573CD); Electronic Banking Svcs (6005);
EVENT: General Management Services (26);
COUNTRY: United Kingdom (4UK);

18/5/5 (Item 2 from file: 583)
DIALOG(R)File 583:Gale Group Globalbase(TM)
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09135352
CCS offers mobile banking
MALAYSIA: MOBILE BANKING BY CCS
New Straits Times (XAS) 22 Jul 1999 Computimes p.12
Language: ENGLISH

Malaysian markets may soon enjoy mobile banking. This is a service whereby the replication of an automated teller machine (**ATM**) is made on to the handphone. The company introducing the service to the Malaysian market is **Chipcard** & Communication Systems Sdn Bhd (CCS) from Malaysia. Now, handphone users are able to access mobile phone banking wherever they are. The service would need a link up between a telecommunications company and a bank. CCS will sell a server to the telecommunication company which costs some RM 200,000 and above while the bank would need implementation of some 4 to six months before the system can get on-line.

COMPANY: **CHIPCARD** & COMMUNICATION SYSTEMS

PRODUCT: Banking Institutions (6010); Cellular Radio Services (4811CR);
EVENT: Product Design & Development (33);
COUNTRY: Malaysia (9MAO);

18/5/6 (Item 3 from file: 583)

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09084779

JETCO to serve as certificate authority
HONG KONG: NEW CA POSITION FOR JETCO
Computerworld HK (XDP) 11 Mar 1999 Cyber World,p.1
Language: ENGLISH

A new certificate authority (CA) position will be adopted by Joint Electronic Teller Services Ltd (JETCO) in Hong Kong, where JETCO will assist all retail banks to connect to the Internet era. By taking up the role as a CA, JETCO will offer **digital certificates** for Internet transactions to its 49 member banks. In addition, JETCO will deliver an **ATM** service to non-Internet member banks who can then perform basic banking transactions on the Web. A CA serves as a trusted third party to certify electronic transaction identities via the **digital certificates** issue.

COMPANY: INTERNET; JETCO; JOINT ELECTRONIC TELLER SERVICES

PRODUCT: Electronic Point of Sale Systems (3573EP); Electronic Banking Svcs (6005); Computer & Data Security Software (7372CD); Computer Services (7370); Database Vendors (7375);
EVENT: National Government Economics (94);
COUNTRY: Hong Kong (9HON);

18/5/7 (Item 4 from file: 583)

DIALOG(R)File 583:Gale Group Globalbase(TM)
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09070551

internet banking just a step away
HONG KONG: INTERNET BANKING TO BE AVAILABLE
The HongKong Standard (XKR) 06 Mar 1999 p.b3
Language: ENGLISH

Joint Electronic Teller Services Co. (Jetco) has signed an agreement with Hewlett-Packard and GTE for setting up Internet Certification Authority (CA) in Hong Kong. Jetco can issue **digital certificates** to its 49 member banks for offering secured and confidential Internet-based banking transaction services to clients.

COMPANY: GTE; HEWLETT-PACKARD; JOINT ELECTRONIC TELLER SERVICES

PRODUCT: Cash Dispensers/ **ATM** Systems (3573CD); Electronic Banking Svcs (6005); Banking Institutions (6010); Communications Eqp ex Tel (3662);
EVENT: National Government Economics (94); Company Formation (14);
COUNTRY: Hong Kong (9HON);

18/5/8 (Item 5 from file: 583)

DIALOG(R)File 583:Gale Group Globalbase(TM)

Sylvia Keys

16-Jun-05 08:13 AM

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09067078

Meps Plans RM350Mil Expansion Of Services

MALAYSIA: MEPS STEPS UP EFFORTS FOR NEW SERVICES

The Star (XAT) 27 Feb 1999 Business p.1

Language: ENGLISH

In a bid to cover a more comprehensive spectrum of electronic banking applications, the country's leading operator of automated teller machine (**ATM**), Malaysian Electronic Payment System Sdn Bhd (Meps) is planning to widen its range of services. For its proposed expansion of services, Meps will earmark over RM 350 mn. Among the range of new services planned are cyber banking, inter-bank Giro, electronic commerce (e-commerce), electronic data interchange payment and Meps cash electronic purse (e-purse), said Mohammad B Abdullah, Meps chairman on 26 February 1999. To facilitate its various credit and debit applications, Meps will soon install new state-of-the-art card acceptance and **ATMs** devices with capability in managing **chipcards** . A commercial pilot project for its e-purse application featuring 21,000 'reloadable' cards, has also been planned by Meps in Bangsar Baru. The **ATM** operator's immediate objective is to boost usage and availability of its e-purse service.

COMPANY: MEPS; MALAYSIAN ELECTRONIC PAYMENT SYSTEM

PRODUCT: Electronic Point of Sale Systems (3573EP); Electronic Banking Svcs (6005);

EVENT: Product Design & Development (33); Capital Expenditure (43);

COUNTRY: Malaysia (9MAO);

18/5/9 (Item 6 from file: 583)

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09028566

TNC launches smartcard reader

SINGAPORE: NEW MERZ CR SMART CARD READER BY TNC

Computerworld (XCK) 22 Oct 1998 p.14

Language: ENGLISH

The new Merz CR smart card reader has been launched by The Networking Company (TNC) in Singapore, at a cost of S\$ 59. The reader conducts **Netrust Digital Certificate** reading/accessing from a smart card to verify parties involved in an electronic dealing. In addition, it is a CashCard for Open Network E-commerce (C-One) compliant cash card reader for Internet payment and e-commerce module. Merz CR smart card comes with the following features: - user-friendly Windows software to view, sort and print **ATM** /cash smart card transactions - serial port (R232) for connecting card reader

COMPANY: INTERNET; TNC; THE NETWORKING COMPANY

EVENT: Product Design & Development (33);

COUNTRY: Singapore (9SIN);

18/5/10 (Item 7 from file: 583)

DIALOG(R)File 583:Gale Group Globalbase(TM)

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06516366

Sylvia Keys

16-Jun-05 08:13 AM

Siemens machines herald future of self-service banking

ASIA: SIEMENS DISPLAYS RETAIL BANKING PRODUCTS

Business Times (XBA) 08 Sep 1997 P.14

Language: ENGLISH

At its Asia-Pacific Self-Service Conference, Siemens Nixdorf displayed its Cash Recycling System, which handles deposits (no over 400 banknotes at a time), withdrawals and foreign currency exchange and credits the amount immediately, making the notes to be available for withdrawals to minimise cash stock and refills and eliminate cash post-processing and at the display was a cash deposit machine being used by United Overseas Bank in Singapore, where demand for the machine might be high given limited manpower and office space in the nation. FaceLine ATMs, which take a photograph of the depositor and then verify the person's identity to allow the legal owner of the **ATM** card to use the services, would recognise users' face using biometric technology but PIN numbers will not be done away. The German maker also showed a pocket balance reader that shows the balance and the last amounts debited and credited via the liquid crystal display) when a **chipcard** is inserted into the reader in addition to the function of being able to read the balance value in a telephone card which works on **chipcard** technology.

COMPANY: UNITED OVERSEAS BANK; SIEMENS NIXDORF

PRODUCT: Cash Dispensers/ **ATM** Systems (3573CD); Electronic Banking Svcs (6005);

EVENT: Product Design & Development (33);

COUNTRY: Southeast Asia (92T); Germany (4GER); Eastern Asia (92E);

18/5/11 (Item 8 from file: 583)

DIALOG(R)File 583:Gale Group Globalbase(TM)

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06028002

Telekom und IBM entwickeln Chip fuer Kreditwesen

GERMANY: CHIP FOR EC AND BANK CARDS

Computerwoche (CWE) 29 Jul 1994 p.17

Language: GERMAN

ZKA, a co-operation of associations of banks in Germany, agreed on a concept of a multi functional **chipcard** for payments. GAD Gesellschaft fuer automatische Datenverarbeitung, Telekom and IBM developed the **chipcard**, which will be used for 50mn EC and bank cards as from 1995.

COMPANY: TELEKOM; IBM; GAD GESELLSCHAFT FUR AUTOMATISCHE DATENVERARBEIT

PRODUCT: Commercial Banks (6020); Consumer Finance Institutions (6140);

Nonbank Credit Card Firms (6141); Cash Dispensers/ **ATM** Systems (3573CD); Electronic Banking Svcs (6005); Semiconductor Devices (3674);

EVENT: Company Formation (14); Market & Industry News (60);

COUNTRY: Germany (4GER);

18/5/12 (Item 1 from file: 94)0

DIALOG(R)File 94:JICST-EPlus

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04185260 JICST ACCESSION NUMBER: 99A0472480 FILE SEGMENT: JICST-E

Large-scale multimedia LAN system with user interfaces for home electronic

appliances .
TAN YASUO (1); NOMURA TAKASHI (2); TAMORI HIROFUMI (2)
(1) Japan Advanced Inst. Sci. and Technol., Hokuriku; (2) Soni Itken
Joho Shori Gakkai Shinpojiu Ronbunshu, 1999, VOL.99,NO.4, PAGE.31-32,
FIG.2, REF.5
JOURNAL NUMBER: Y0978BAT ISSN NO: 1344-0640
UNIVERSAL DECIMAL CLASSIFICATION: 681.3:654
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Conference Proceeding
ARTICLE TYPE: Short Communication
MEDIA TYPE: Printed Publication
DESCRIPTORS: LAN; multi-media; **ATM** network; interconnection; protocol;
interface; organization standard; IEEE; university; campus; picture
signal
IDENTIFIERS: video signal
BROADER DESCRIPTORS: computer network; communication network; information
network; network; information media; connection; rule;
standard(specification); standard; institute; school; signal
CLASSIFICATION CODE(S): JC03000K
?

22/5/1 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

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5638391

Title: The "super ATM " comes of age

Author(s): O'Sullivan, O.

Journal: ABA Banking Journal vol.89, no.5 p.72, 74

Publisher: Simmons-Boardman Publishing for American Bankers Assoc,

Publication Date: May 1997 Country of Publication: USA

CODEN: ABAJD5 ISSN: 0194-5947

SICI: 0194-5947(199705)89:5L:72:TC;1-R

Material Identity Number: B557-97006

Language: English Document Type: Journal Paper (JP)

Treatment: Economic aspects (E); Practical (P)

Abstract: Docunet Inc., which provides the "super ATMs" now at 100 Baltimore sites, is working to make virtual ticketing a nationwide reality. The San Francisco firm provides the system integration allowing vendors to distribute their wares through banks' ATM networks. MasterCard announced that issuers in its Cirrus ATM network must be capable of handling stamp dispensing, by year-end, and other non-traditional dispensing later. Visa's participation in super ATMs includes a plan to have the next generation of Docunet terminals dispense Visa Travel Cash smart cards, which authorize travellers' foreign currency withdrawals. Docunet dispenses all the non-traditional ATM items some others have dispensed individually, stamps or entertainment tickets, for instance. Dedicated Olivetti dispensers are used in the Baltimore application, but Docunet is working with Diebold, Inc. to marry non-traditional dispensing with full, traditional ATM functions on existing hardware. (0 Refs)

Subfile: D

Descriptors: automatic teller machines ; entertainment; MasterCard; Visa

Identifiers: super ATM ; Docunet; virtual ticketing; ATM network; MasterCard; Visa; foreign currency withdrawals; Diebold; Olivetti

Class Codes: D2050E (Banking); D2090 (Leisure industry, travel and transport)

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22/5/2 (Item 2 from file: 2)

DIALOG(R)File 2:INSPEC

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4894314

Title: Mandates push bank use of CCTV tech

Journal: Security vol.32, no.1 p.29

Publication Date: Jan. 1995 Country of Publication: USA

CODEN: SECUEU ISSN: 0890-8826

Language: English Document Type: Journal Paper (JP)

Treatment: Practical (P)

Abstract: Spending on CCTV equipment by U.S. financial institutions is up 30 percent from 1992 to 1993, and an additional 50 percent growth is expected in 1994. According to a poll by Diebold, Inc. Canton, Ohio, CCTV is hot in the ever-changing banking business. Other industry trends: acceleration of consolidations and mergers; a reduction in branches but renovations in those that remain; cost containment; an increase in automated teller machine use; and the glimmer of electronic banking. Couple those trends with the constant threat of crime and fraud, and it's obvious, say the experts, that financial institutions must find new ways of improving security in branches, offices and ATM locations. (0 Refs)

Subfile: D
Descriptors: banking; closed circuit television; equipment selection; fraud; security
Identifiers: CCTV equipment; bank; U.S. financial institutions; poll; banking industry trends; consolidations; mergers; branches; cost containment; automated teller machine; electronic banking; crime; fraud; security; offices; wireless transmission system; **ATM** locations
Class Codes: D3035 (Monitoring and alarm systems); D3050 (Video systems); D2050E (Banking)
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22/5/3 (Item 3 from file: 2)
DIALOG(R)File 2:INSPEC
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04356449

Title: ID, access card does the wash!
Journal: Security vol.29, no.13 p.35
Publication Date: Dec. 1992 Country of Publication: USA
CODEN: SECUEU ISSN: 0890-8826
Language: English Document Type: Journal Paper (JP)
Treatment: General, Review (G)
Abstract: An identification card can do the wash at Oklahoma State University (OSU) in Stillwater, OSU's unique project aims to give multi-function ID cards to 22000 students, faculty and staff, who will use them for access to athletic events, the recreational center, the wellness center and computer labs. The card will pay for on-campus meals, buy snacks from vending machines, open locked residential hall doors and pay for laundry use. Also planned is access to on-campus ATMs and parking control. Driving the ID card is a comprehensive Integrated Campus Access Management (ICAM) system from **Diebold, Inc.** that covers the 76-building, 840-acre campus. The system uses a single database of shared information. (0 Refs)
Subfile: D
Descriptors: access control; debit transactions; education; plastic cards
Identifiers: on-campus **ATM**; access card; identification card; Oklahoma State University; Stillwater; parking control
Class Codes: D2030 (Education and training); D2050E (Banking); D3035 (Monitoring and alarm systems)

22/5/4 (Item 4 from file: 2)
DIALOG(R)File 2:INSPEC
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03163375 INSPEC Abstract Number: D88001946

Title: Commitment, cooperation keys to direct debit POS success
Author(s): Salzmann, E.J.
Journal: Bank Administration vol.64, no.4 p.32-4
Publication Date: April 1988 Country of Publication: USA
CODEN: BAADEQ ISSN: 0024-9823
Language: English Document Type: Journal Paper (JP)
Treatment: General, Review (G); Practical (P)
Abstract: Merchant National Bank & Inst. has thrown in with Marsh Supermarkets and **Diebold Inc.** to challenge the naysayers in a cooperative POS venture. Marsh now offers its customers POS capability at three central Indiana stores and, following an encouraging pilot program, is planning to add debit card capability at 10 more stores. Shoppers can run Merchants **ATM** cards through a Diebold 1042 card reader, enter personal identification numbers and receive authorization for the purchase

amount. So far, only Marsh customers with Merchants cards can use the system, which needs to be extended to all customers to become successful.

(0 Refs)

Subfile: D

Descriptors: point of sale systems

Identifiers: direct debit POS; Merchant National Bank & Inst.; Marsh Supermarkets; cooperative; Diebold 1042 card reader

Class Codes: D2050E (Banking); D2140 (Marketing, retailing and distribution)

22/5/5 (Item 5 from file: 2)

DIALOG(R)File 2:INSPEC

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02254198 INSPEC Abstract Number: C84027032, D84001198

Title: Microprocessor-based system supports ATM POS transactions

Journal: Bank Systems & Equipment vol.21, no.2 p.90

Publication Date: Feb. 1984 Country of Publication: USA

CODEN: BSEQD6 ISSN: 0146-0900

Language: English Document Type: Journal Paper (JP)

Treatment: General, Review (G); Practical (P)

Abstract: A state-of-the-art, microprocessor family of systems for transaction processing and multiple concurrent application support has been introduced by **Diebold Inc**. The Diebold 1000 is designed to give maximum single-application performance and the capability to support multiple applications concurrently. The Diebold 1000 is based on the Intel 80286 microprocessor technology. The microcomputer system incorporates two microprocessors, a main and a communications processor. This dual-processor system divides the load between applications processing and data communications processing, improving the overall performance of the system and minimizing transaction time. The 5/sup 1///sub 4/-inch floppy disk drives and 10 MB Winchester hard disk drives are available to provide data and program storage. (0 Refs)

Subfile: C D

Descriptors: EFTS; point of sale systems

Identifiers: microprocessor-based system; data storage point of sale systems; automated teller machines; POS transactions; transaction processing; multiple concurrent application support; **Diebold Inc**.; Diebold 1000; Intel 80286 microprocessor technology; microcomputer system; communications processor; dual-processor system; transaction time; floppy disk drives; Winchester hard disk drives; program storage

Class Codes: C7120 (Finance); D2050E (Banking)

22/5/6 (Item 1 from file: 583)

DIALOG(R)File 583:Gale Group Globalbase(TM)

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09491893

Aumenta Banamex numero de cajeros

MEXICO: BANAMEX TO INCREASE **ATM** NETWORK

Reforma (Mexico) (UAT) 23 Mar 2001 online

Language: SPANISH

Banamex will increase its **ATM** network in Mexico by 1,000 to get to 3,900 units countrywide by the end of 2001. So far Banamex has bought 500 of these machines from **Diebold Incorporated**, the rest are in the process of deciding the supplier. Within four months the bank will offer new value added services through its **ATM** network such as airtime for mobile phone

operators. Besides, Banamex is going to increase the withdrawal limit per day, which nowadays is MP 3,000. *

COMPANY: **DIEBOLD INCORPORATED** ; BANAMEX

PRODUCT: Retail Banking Services (6006); Clearing Banks (6010CB);
Commercial Banks (6020); Electronic Point of Sale Systems (3573EP);
Electronic Banking Svcs (6005);
EVENT: Capital Expenditure (43); Use of Materials & Supplies (46);
Contracts & Orders (61);
COUNTRY: Mexico (3MEX);

22/5/7 (Item 2 from file: 583)
DIALOG(R)File 583:Gale Group Globalbase(TM)
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09186814
Diebold unveils new range of retail banking solutions
INDIA: NEW BANKING SOLUTION BY DIEBOLD
Times of India (TSI) 24 Jun 1999 p.17
Language: ENGLISH

In an alliance with its joint venture Diebold HMA (India), US-based automated teller machine (**ATM**) manufacturer, **Diebold Inc** , has launched a new range of retail banking solutions in India. The new banking technology solution will be cost-effective which will serve the self-service terminal and **ATM** industry in India.

COMPANY: DIEBOLD; DIEBOLD HMA

EVENT: Product Design & Development (33);
COUNTRY: India (9IND);

22/5/8 (Item 3 from file: 583)
DIALOG(R)File 583:Gale Group Globalbase(TM)
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09119963
Diebold introduces America's first iris recognition **ATM**
MALDIVES: DMS INSTALLS ATMS FOR BANK OF MALDIVES
Daily News (XBI) 31 May 1999
Language: ENGLISH

Data Management Systems Ltd (DMS) of Sri Lanka will be installing several automated teller machines (ATMs) in a few branches of Bank of Maldives. DMS is the distributor of **Diebold Inc** 's (US) **ATM** .

COMPANY: BANK OF MALDIVES; DMS; DATA MANAGEMENT SYSTEMS; DIEBOLD

PRODUCT: Electronic Point of Sale Systems (3573EP); Electronic Banking Svcs (6005);
EVENT: Capital Expenditure (43); Use of Materials & Supplies (46);
Contracts & Orders (61);
COUNTRY: Maldive Islands (9MLD); Sri Lanka (9SRI);

22/5/9 (Item 4 from file: 583)
DIALOG(R)File 583:Gale Group Globalbase(TM)
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Sylvia Keys

16-Jun-05 08:15 AM

09109911

Prime Systems Distributes For Diebold

PHILIPPINES: DIEBOLD APPOINTS NEW DISTRIBUTOR

Channel Asia (AHT) Apr 1999 p.16

Language: ENGLISH

Diebold Inc, a provider of integrated security solutions and automated teller machines, has appointed Prime Systems Plus Inc as its new Philippines distributor. Under the agreement, Prime Systems Plus will undertake the delivery of client marketing and support services to Diebold.

COMPANY: PRIME SYSTEMS PLUS; DIEBOLD

PRODUCT: Cash Dispensers/ **ATM** Systems (3573CD); Electronic Banking Svcs (6005); Computer & Data Security Software (7372CD);

EVENT: Company Formation (14); Marketing Procedures (24);

COUNTRY: Philippines (9PHI);

22/5/10 (Item 5 from file: 583)

DIALOG(R)File 583:Gale Group Globalbase(TM)

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09062184

Diebold Inc to establish a new subsidiary inThailand

THAILAND: NEW SUBSIDIARY OF DIEBOLD

Bangkok Post (XBN) 17 Feb 1999 database p.1

Language: ENGLISH

World leader in offering integrated delivery systems and services, **Diebold Inc**, will be setting up a subsidiary in Thailand. Named Diebold Thailand, the unit will have Mr Verapun Patayanindee as the managing director. For more than ten years, banks in Thailand have used the automated teller machines of Diebold. Customers in Thailand will be provided with service and sales support from Diebold Thailand.

COMPANY: DIEBOLD THAILAND; DIEBOLD

PRODUCT: Cash Dispensers/ **ATM** Systems (3573CD); Electronic Banking Svcs (6005); Machinery ex Electric (3500);

EVENT: Plant/Facilities/Equipment (44);

COUNTRY: Thailand (9THA);

22/5/11 (Item 6 from file: 583)

DIALOG(R)File 583:Gale Group Globalbase(TM)

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06578928

Diebold Launches Voice-Recognition ATMs

WORLD: NEW OPTIMUM **ATM** LAUNCHED BY DIEBOLD

IT Times (XDM) 20 Jan 1998 P.28

Language: ENGLISH

The new OPTimum **ATM** (automated teller machine) has been launched by **Diebold Inc** globally. The OPTimum **ATM** integrates face-reading and voice-print biometrics technology. The OPTimum **ATM** is developed by Diebold, Keyware Technologies and Visionics Corp. The **ATM** operates Windows NT software platform and supports Microsoft Windows DNA

(Distributed iNternet Architecture) for Financial Services. When someone steps into the **ATM**, an **ATM** camera captures the user's image and a special Visionics FaceIt software offers automatic facial detection, location, tracking and identification. The person then says a password into the **ATM**'s microphone. KeyWare's Voice Guardian technology will then match the user's voice against a recorded voiceprint kept in a database. Upon successful verification, the user is granted his/her account access. The **ATM** does not require any personal identification numbers (PIN) to key or any passwords to enter.

COMPANY: MICROSOFT; VISIONICS; KEYWARE TECHNOLOGIES; DIEBOLD

PRODUCT: Cash Dispensers/ **ATM** Systems (3573CD); Electronic Banking Svcs (6005);

EVENT: Product Design & Development (33); Company Formation (14);

COUNTRY: General Worldwide (0W);

22/5/12 (Item 7 from file: 583)

DIALOG(R)File 583:Gale Group Globalbase(TM)

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06235307

Diebold to raise share in Indian **ATM** market

INDIA: POTENTIAL DEMAND OF ATMS

Financial Express (XAG) 14 Nov 1995 P.3

Language: ENGLISH

Diebold Incorporated of the USA estimated that the potential users of ATMs in India are approximately 180 to 200 mn. In view of that, Diebold is going to spend RS 16 crore for acquiring 50% stake in HMA Datasystems as part of its efforts to increase its **ATM** production capacity in India.

COMPANY: HMA DATASYSTEMS; DIEBOLD

PRODUCT: Electronic Point of Sale Systems (3573EP); Electronic Banking Svcs (6005); Electronic Financial Services Sys (3573EF); Financial Services Software (7372FI);

EVENT: Market & Industry News (60); Sales & Consumption (65);

Plant/Facilities/Equipment (44); Company Acquisitions (16);

COUNTRY: India (9IND); United States (1USA);

22/5/13 (Item 8 from file: 583)

DIALOG(R)File 583:Gale Group Globalbase(TM)

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05390106

Diebold Inc saw third quarter

US - DIEBOLD REPORTS THIRD QUARTER PROFIT UP 18%

Computergram International (CGI) 20 October 1992 p1

ISSN: 0268-716X

Diebold saw third quarter net up 18.4% at USD1r11 mil, on turnover up 5.2% at USD1r133.2 mil; net profit for the nine months was down 56.5% at USD1r9.2 mil, after USD1r16.8 charges due to the cumulative effect of an accounting change, on turnover that rose 7.9% to USD1r389.5 mil. Net earnings per share rose 17.1% to USD1r0.82 in the quarter, fell 56.9% to USD1r0.69 in the nine months.*

COMPANY: DIEBOLD

PRODUCT: Cash Dispensers/ **ATM** Systems (3573CD);
EVENT: COMPANY REPORTS & ACCOUNTS - QUARTERLY (83);
COUNTRY: United States (1USA); NATO Countries (420); South East Asia
Treaty Organisation (913);

22/5/14 (Item 1 from file: 474)
DIALOG(R)File 474:New York Times Abs
(c) 2005 The New York Times. All rts. reserv.

07720475 NYT Sequence Number: 134171991026
DIEBOLD TO BUY BRAZILIAN A.T.M. MAKER
Dow Jones
New York Times, Col. 1, Pg. 4, Sec. C
Tuesday October 26 1999
DOCUMENT TYPE: Newspaper JOURNAL CODE: NYT LANGUAGE: English
RECORD TYPE: Abstract

ABSTRACT:

Automated teller machine manufacturer **Diebold Inc** acquires Procomp Amazonia Industria Electronica SA, Brazilian maker of **ATM** 's, for \$225 million in cash and stock (S)

COMPANY NAMES: Procomp Amazonia Industria Electronica SA; **Diebold Inc**
DESCRIPTORS: Mergers, Acquisitions and Divestitures

22/5/15 (Item 2 from file: 474)
DIALOG(R)File 474:New York Times Abs
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06009469 NYT Sequence Number: 588342910903
JOB FOR I.B.M.; DIEBOLD IN DEAL
Reuters
New York Times, Col. 6, Pg. 5, Sec. D
Tuesday September 3 1991
DOCUMENT TYPE: Newspaper JOURNAL CODE: NYT LANGUAGE: English
RECORD TYPE: Abstract

ABSTRACT:

International Business Machines Corp wins contract to provide computers and automated bank teller machines for Bank Slaski of Poland; Daimler-Benz AG says one of its units acquired majority stake in European operations of **Diebold Inc** (S)

COMPANY NAMES: BANK SLASKI (POLAND); INTERNATIONAL BUSINESS MACHINES CORP (IBM); DAIMLER-BENZ AG; **DIEBOLD INC**
DESCRIPTORS: DATA PROCESSING (COMPUTERS); **AUTOMATIC TELLER MACHINES** (**ATM**); BANKS AND BANKING
GEOGRAPHIC NAMES: POLAND

22/5/16 (Item 3 from file: 474)
DIALOG(R)File 474:New York Times Abs
(c) 2005 The New York Times. All rts. reserv.

05813532 NYT Sequence Number: 000000900915
COMPANY BRIEFS
New York Times, Col. 1, Pg. 33, Sec. 1

Saturday September 15 1990

DOCUMENT TYPE: Newspaper JOURNAL CODE: NYT LANGUAGE: English
RECORD TYPE: Abstract

ABSTRACT:

Diebold Inc and International Business Machines Corp says it has formed Interbold, joint venture that will provide automated teller machines and financial self-service systems worldwide (S)

COMPANY NAMES: INTERBOLD; **DIEBOLD INC** ; INTERNATIONAL BUSINESS MACHINES CORP (IBM)

DESCRIPTORS: JOINT VENTURES AND CONSORTIUMS; **AUTOMATIC TELLER MACHINES (ATM)**

22/5/17 (Item 4 from file: 474)

DIALOG(R)File 474:New York Times Abs
(c) 2005 The New York Times. All rts. reserv.

05797928 NYT Sequence Number: 210782900713

I.B.M., -DIEBOLD JOINT VENTURE

New York Times, Col. 3, Pg. 4, Sec. D

Friday July 13 1990

DOCUMENT TYPE: Newspaper JOURNAL CODE: NYT LANGUAGE: English
RECORD TYPE: Abstract

ABSTRACT:

International Business Machines Corp and **Diebold Inc** to combine their automated teller machine operations and develop and market new and existing products worldwide under a joint venture (S)

COMPANY NAMES: INTERNATIONAL BUSINESS MACHINES CORP (IBM); **DIEBOLD INC**

DESCRIPTORS: **AUTOMATIC TELLER MACHINES** ; JOINT VENTURES AND CONSORTIUMS

22/5/18 (Item 5 from file: 474)

DIALOG(R)File 474:New York Times Abs
(c) 2005 The New York Times. All rts. reserv.

01195631 NYT Sequence Number: 081312820908

(NV Philips (Netherlands) subsidiary agrees to market Diebold Inc automatic teller machines worldwide (S).)

New York Times, Col. 6, Pg. 8, Sec. 4

Wednesday September 8 1982

DOCUMENT TYPE: Newspaper JOURNAL CODE: NYT LANGUAGE: English
RECORD TYPE: Abstract

COMPANY NAMES: PHILIPS GLOEILAMPENFABRIEKEN NV (PHILIPS LAMP CO); **DIEBOLD INC**

DESCRIPTORS: ELECTRONICS; INTERNATIONAL TRADE AND WORLD MARKET; CUSTOMER BANK COMMUNICATION TERMINALS; FRANCHISES AND LICENSING AGREEMENTS; MACHINERY AND EQUIPMENT

GEOGRAPHIC NAMES: NETHERLANDS

22/5/19 (Item 1 from file: 475)

DIALOG(R)File 475:Wall Street Journal Abs
(c) 2005 The New York Times. All rts. reserv.

08072762 NYT Sequence Number: 000000000829

ENTERPRISE

TANNENBAUM, JEFFREY A

Wall Street Journal, Col. 3, Pg. 2, Sec. B

Tuesday August 29 2000

DOCUMENT TYPE: Newspaper JOURNAL CODE: WSJ LANGUAGE: English

RECORD TYPE: Abstract

ABSTRACT:

Enterprise column reports **Diebold Inc** 's D-CASH marketing program offers cash machines to merchants under five-year franchise program, reducing merchants' break-even point on machines to 150 transactions per month from 400 (M)

COMPANY NAMES: **DIEBOLD INC**

DESCRIPTORS: **AUTOMATIC TELLER MACHINES**

PERSONAL NAMES: TANNENBAUM, JEFFREY A

22/5/20 (Item 2 from file: 475)

DIALOG(R)File 475:Wall Street Journal Abs

(c) 2005 The New York Times. All rts. reserv.

08021444 NYT Sequence Number: 000000990512

BANK UNITED SAYS: DON'T FIRE (CASH) UNTIL YOU SEE THE COLORS OF THEIR EYES

BROOKS, RICK

Wall Street Journal, Col. 3, Pg. 2, Sec. B

Wednesday May 12 1999

DOCUMENT TYPE: Newspaper JOURNAL CODE: WSJ LANGUAGE: English

RECORD TYPE: Abstract

ABSTRACT:

Bank United Corp, hoping to attract customers drawn to new technology, will install the nation's first automated teller machines that can identify customers by looking at their eyes; the machines, manufactured by **Diebold Inc**, use a camera system developed by Sensar Inc to photograph the customer's iris and compare it with an image already on file at the bank (M)

COMPANY NAMES: **BANK UNITED CORP; DIEBOLD INC ; SENSAR INC**

DESCRIPTORS: **BANKS AND BANKING; AUTOMATIC TELLER MACHINES (ATM); IDENTIFICATION DEVICES**

PERSONAL NAMES: BROOKS, RICK

22/5/21 (Item 3 from file: 475)

DIALOG(R)File 475:Wall Street Journal Abs

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07944794 NYT Sequence Number: 000000970630

INTERNATIONAL BUSINESS MACHINES CORP

Wall Street Journal, Col. 3, Pg. 11, Sec. A

Monday June 30 1997

DOCUMENT TYPE: Newspaper JOURNAL CODE: WSJ LANGUAGE: English

RECORD TYPE: Abstract

ABSTRACT:

Interbold, joint venture of **Diebold Inc** and IBM, will discontinue marketing and distribution agreement with IBM that gave IBM exclusive rights to distribute its automated teller machines in many areas outside US

(S)

COMPANY NAMES: Interbold (Co); Diebold Inc ; INTERNATIONAL BUSINESS
MACHINES CORP
DESCRIPTORS: Automatic Teller Machines (Atm)

22/5/22 (Item 4 from file: 475)
DIALOG(R)File 475:Wall Street Journal Abs
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06531908

WHO'S NEWS

Wall Street Journal, Col. 5, Pg. 2, Sec. B
Monday August 2 1993
DOCUMENT TYPE: Newspaper JOURNAL CODE: WSJ LANGUAGE: English
RECORD TYPE: Abstract

ABSTRACT:

Diebold Inc names Alben W Warf as vice president and general manager of InterBold, its automatic teller machine and self service systems joint venture with IBM succeeding Gregg A Searle who was promoted to executive vice president (M)

COMPANY NAMES: DIEBOLD INC ; INTERBOLD; INTERNATIONAL BUSINESS MACHINES
CORP (IBM)
DESCRIPTORS: JOINT VENTURES AND CONSORTIUMS; APPOINTMENTS AND EXECUTIVE
CHANGES; BIOGRAPHICAL INFORMATION
PERSONAL NAMES: WARF, ALBEN W; SEARLE, GREGG A

22/5/23 (Item 5 from file: 475)
DIALOG(R)File 475:Wall Street Journal Abs
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06528319

BUSINESS BRIEFS

Wall Street Journal, Col. 6, Pg. 4, Sec. B
Thursday October 28 1993
DOCUMENT TYPE: Newspaper JOURNAL CODE: WSJ LANGUAGE: English
RECORD TYPE: Abstract

ABSTRACT:

Diebold Inc says it agreed to acquire 50% of OLTP ATM Systems CA of Caracas (Venezuela); terms undisclosed (M)

COMPANY NAMES: DIEBOLD INC ; OLTP ATM SYSTEMS CA
DESCRIPTORS: MERGERS, ACQUISITIONS AND DIVESTITURES; AUTOMATIC TELLER
MACHINES (ATM)
GEOGRAPHIC NAMES: VENEZUELA

22/5/24 (Item 6 from file: 475)
DIALOG(R)File 475:Wall Street Journal Abs
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06516976

DIEBOLD FORMS CHINESE VENTURE

Wall Street Journal, Col. 5, Pg. 5, Sec. A
Thursday May 27 1993

DOCUMENT TYPE: Newspaper JOURNAL CODE: WSJ LANGUAGE: English
RECORD TYPE: Abstract

ABSTRACT:

Diebold Inc, a maker of automated teller machines and security products, says it formed a joint venture to make ATMs in China; terms are not disclosed (S)

COMPANY NAMES: **DIEBOLD INC**
DESCRIPTORS: JOINT VENTURES AND CONSORTIUMS; FOREIGN INVESTMENTS;
AUTOMATIC TELLER MACHINES (ATM)
GEOGRAPHIC NAMES: CHINA

22/5/25 (Item 7 from file: 475)
DIALOG(R)File 475:Wall Street Journal Abs
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06263145

BUSINESS BRIEFS

Wall Street Journal, Col. 6, Pg. 8, Sec. B
Monday April 27 1992
DOCUMENT TYPE: Newspaper JOURNAL CODE: WSJ LANGUAGE: English
RECORD TYPE: Abstract

ABSTRACT:

Interbold, joint venture of **Diebold Inc** and International Business Machines Corp, gets BankAmerica order for 1,523 automated tellers (S)

COMPANY NAMES: **DIEBOLD INC**; INTERBOLD; INTERNATIONAL BUSINESS MACHINES
CORP (IBM); BANKAMERICA CORP
DESCRIPTORS: **AUTOMATIC TELLER MACHINES (ATM)**

22/5/26 (Item 8 from file: 475)
DIALOG(R)File 475:Wall Street Journal Abs
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05774086

CORRECTIONS & AMPLIFICATIONS

Wall Street Journal, Col. 1, Pg. 8, Sec. A
Wednesday September 19 1990
DOCUMENT TYPE: Newspaper JOURNAL CODE: WSJ LANGUAGE: English
RECORD TYPE: Abstract

ABSTRACT:

Diebold Inc and IBM says their joint venture to make and sell **automatic teller machines** will begin operations immediately; starting date of new company was incorrectly stated in Sept 14 editions (S)

COMPANY NAMES: **DIEBOLD INC**; INTERNATIONAL BUSINESS MACHINES CORP (IBM)
DESCRIPTORS: CORRECTION STORIES; **AUTOMATIC TELLER MACHINES (ATM)**

22/5/27 (Item 9 from file: 475)
DIALOG(R)File 475:Wall Street Journal Abs
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05773774

DIEBOLD, IBM JOINT VENTURE

Wall Street Journal, Col. 6, Pg. 16, Sec. C
Friday September 14 1990
DOCUMENT TYPE: Newspaper JOURNAL CODE: WSJ LANGUAGE: English
RECORD TYPE: Abstract

ABSTRACT:

Diebold Inc and International Business Machines Corp say they completed previously announced agreement to form joint venture to make and sell automatic teller machines worldwide (S)

COMPANY NAMES: DIEBOLD INC ; INTERNATIONAL BUSINESS MACHINES CORP (IBM)
DESCRIPTORS: AUTOMATIC TELLER MACHINES (ATM); BANKS AND BANKING;
JOINT VENTURES AND CONSORTIUMS

22/5/28 (Item 10 from file: 475)
DIALOG(R)File 475:Wall Street Journal Abs
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01140841 NYT Sequence Number: 007056801126
(Philips Data Systems Co, Colchester (Eng), agrees to buy and market
Diebold Inc 's 9000 series automatic teller machines in GB (S).)
Wall Street Journal, Col. 4, Pg. 32
Wednesday November 26 1980
DOCUMENT TYPE: Newspaper JOURNAL CODE: WSJ LANGUAGE: English
RECORD TYPE: Abstract

COMPANY NAMES: DIEBOLD INC ; PHILIPS DATA SYSTEMS CO
DESCRIPTORS: MARKETING AND MERCHANDISING; CONTRACTS AND OTHER SALES
AGREEMENTS; CUSTOMER BANK COMMUNICATION; INTERNATIONAL TRADE AND WORLD
MARKET
GEOGRAPHIC NAMES: GREAT BRITAIN
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